

17 JULY 2001

Acquisition

MODIFICATION MANAGEMENT



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the AFDPO/PP WWW site at:
<http://afpubs.hq.af.mil>.

OPR: SAF/AQXA (Major Gordon Weiss)
Supersedes AFI 63-1101, 1 August 2000.

Certified by: SAF/AQX (Mr. Blaise J. Durante)
Pages: 57
Distribution: F

This Air Force Instruction (AFI) implements Air Force Policy Directive (AFPD) 63-11, *Modification System*, which applies to all modifications. It defines and describes the modification process (see attachments 2 and 3) and delegates Milestone Decision Authority (MDA) for modifications to the lowest appropriate level. This instruction provides guidance and procedures for managing modifications to systems, product groups, and material groups. Software-only changes are not addressed by this AFI. For additional information on the acquisition process and terminology, consult AFPD 63-1, AFPD 63-11, and other related publications referenced in attachment 1. This AFI applies to all regular Air Force (AF), Air National Guard (ANG), and Air Force Reserve Command (AFRC) forces. For this AFI, the term Major Command (MAJCOM) includes the ANG. All dollars referred to in this AFI reflect Fiscal Year (FY) 96 constant dollars in accordance with AFI 10-601.

This is the first publication of AFI 63-1101. This AFI clarifies and streamlines guidance on managing modification programs. It also provides instructions for the use of the AF Form 1067, *Modification Proposal*, **Attachment 4**, and the AF Form 3525, *CCB Modification Requirements and Approval Document*, **Attachment 5**. All modification programs will follow the process outlined in this AFI. Special case instructions, i.e., Munitions, Space, Defense Communications Systems Equipment, etc., are provided in **Attachment 6**.

SUMMARY OF REVISIONS

This Interim Change updates AFI 63-1101, *Modification Management*, dated 1 August 2000. It incorporates changes to designate AFI 63-1101 as the prescribing directive for the Air Force Form 3525, *CCB Modification Requirements and Approval Document*. See the last attachment of the publication, IC 2001, for the complete IC. A bar (|) indicates revision from the previous edition.

1. Modification Definition. An alteration to a configuration item (CI) applicable to aircraft, missiles, support equipment, ground stations software (imbedded), trainers, etc. As a minimum, the alteration changes the form, fit, function or interface of the item. There are two types of modifications, temporary and permanent, which can be made to Air Force weapon systems. A weapon system is defined as a combination of elements that function together to produce the capabilities required to fulfill a mission need, including hardware, equipment, software, and all Integrated Logistics Support elements, but excluding construction or other improvements to real property.

1.1. Temporary Modifications. Temporary modifications change the configuration of a system for flight or ground test purposes or support the accomplishment of a specific mission. Temporary modifications use existing Commercial-Off-The-Shelf (COTS) and Non Developmental Items (NDI) or stock listed systems, equipment, spares, materials, etc., to accomplish the modification and are typically accomplished locally, by a unit, with the appropriate funds. There are two subsets of temporary modifications as identified and defined as follows:

1.1.1. Temporary-1 (T-1). T-1 modifications temporarily change the configuration of a CI to perform a special mission, add or remove equipment to provide increased capability for a special mission. T-1 modifications are normally made by the using command for operational reasons, are not used as substitutes for permanent modifications, and, are not authorized permanent logistics support (technical data, software changes, engineering support, spares or support equipment, etc.). Logistics support will be constrained to the level of effort required for the temporary modification program. T-1 modifications will not be maintained on the system for more than one year without a waiver from the single manager (SM). T-1 modifications will not be installed on more than five systems without HQ USAF/ILM approval. The configured item must be capable of being returned to its original configuration within 48 hours. T-1 modifications are normally funded with 3400 (O&M) funds. (See also section 3.7.)

1.1.2. Temporary-2 (T-2). T-2 modifications are required to support research, development, test and evaluation (RDT&E). T-2 modifications will normally be accomplished on programs having an approved Program Management Directive (PMD). T-2 modifications will not be maintained on the system for longer than the approved test program requires. T-2 modifications are usually funded with 3600 (RT&E) funds. (See section 3.7 and 3.8). Systems will be returned to their original configuration upon completion of the test. T-2 mods are usually done to:

1.1.2.1. Evaluate a proposed permanent modification on a selected set of operational or test systems.

1.1.2.2. Evaluate an approved acquisition program (e.g., support equipment; modification of chase aircraft; installation of instrumentation into the system; modification to aerial targets where targets support various tests and, due to attrition in the test, need special attention; etc.).

1.1.2.3. Evaluate operational suitability, including reliability and maintainability of a potential replacement item, in a real-time environment. (Note that some modifications are related to out-of-production and diminishing manufacturing sources. Consult AFI 65-601 to determine whether to use procurement versus RDT&E funds.)

1.1.2.4. Evaluate the aircraft/stores capability of an existing or new store on an existing aircraft.

1.2. Permanent Modifications. Permanent modifications change the form, fit, function or interface of a configured item. They are programs that are funded, or programmed to be funded, wholly or in

part from the central procurement appropriations. All requirements resulting in modification programs must be established in a PMD before initiating any work or obligating any funds in accordance with existing directives. All permanent modifications will be managed as acquisition programs. Permanent modifications, except for permanent-safety modifications, will not be done unless sufficient service life remains to justify the modification. There are two subsets of permanent modifications.

1.2.1. Permanent (P). These modifications make permanent changes to correct material deficiencies, improve reliability and maintainability, improve performance, or add or remove capability. Permanent modifications should be accomplished on complete blocks or series of the system, equipment, or material.

1.2.2. Permanent-Safety (P-S). Safety modifications are permanent modifications which correct material or other deficiencies which could endanger the safety or health of personnel or cause loss or extensive damage to systems or equipment. Safety modifications have priority and precedence over all other permanent modifications. Safety modifications will follow the same procedures as permanent modifications, but shall take priority over all other modifications for funding and implementation. All safety modifications will be accomplished in the minimum amount of time required to ensure a safe and operationally effective fix. See AFI 21-101, *Maintenance Management of Aircraft*, for additional guidance.

1.2.2.1. A modification that corrects a material deficiency which caused a Class A Mishap (per AFI 91-204), as determined by the Air Force Safety Center Memorandum of Final Evaluation, shall be evaluated as a safety modification. In such cases, the SM and the lead command /CC shall provide coordinated corrective action on the mishap recommendation to HQ USAF/SE. The SM must coordinate with the appropriate Defense Acquisition Commander (DAC) or Program Executive Officer (PEO).

1.2.2.2. For all other cases, in order for any deficiency to warrant a safety modification, the following steps must occur:

1.2.2.2.1. The deficiency is determined, by either the SM or lead command/CC, to have the potential to cause, at a minimum, serious injury to personnel or extensive damage to systems/equipment.

1.2.2.2.2. The SM must perform risk analysis of the deficiency to determine if a modification shall be required, and if so, identify elements of procedure and schedule associated with its optimal accomplishment.

1.2.2.2.3. The SM shall take appropriate interim actions to limit operational risk prior to modifications occurring, including the consideration of system grounding or restrictions.

1.2.2.2.4. The SM and lead command/CC must forward a request for a safety modification designation, to the Chief of Air Force Safety for approval. If approved, the modification shall be identified as a safety modification.

1.2.3. To plan, program, budget, and install a modification, five or more years of programmed life of the end item must be forecast to remain after installation. Modification approval, funding, acquisition, and installation will be adjusted accordingly. SMs are responsible for obtaining timely force structure documentation to ensure that the modification adheres to the five-year rule. AF/XP is responsible for providing accurate and timely force structure data. This rule may not apply to some commodity modifications, which are programmed for multiple host platforms

scheduled to remain in the inventory. Special consideration will be given to space launch boosters and satellites, which have a limited operational life span.

1.2.4. The five-year rule may be waived by the Secretary of the Air Force (SECAF). In order to do so, the SECAF must determine that action to be in the best interest to the national security of the United States and must notify the congressional defense committees in writing. Procedures for seeking SECAF waiver may be obtained by contacting SAF/AQXR.

1.3. Operational Safety, Suitability, & Effectiveness (OSS&E). For all temporary and permanent modifications, the system and end item OSS&E shall be preserved in accordance with the following directive and instruction: AFPD 63-12, "Assurance of OSS&E" and AFI 63-1201, "Assurance of OSS&E." OSS&E is integral to the modification management process and as such shall be preserved throughout modification planning and execution to ensure operational safety, design integrity and suitability for all modified systems and end items. The SM of the system being modified is responsible for the engineering integrity of that system. Therefore, all proposed temporary and permanent modifications must be reviewed by the lead command Configuration Review Board (CRB) and be approved by the SM prior to implementation.

2. Roles and Responsibilities

2.1. The Lead Command, as described in AFPD 10-9, paragraph 1, will:

- 2.1.1. Designate an office of primary responsibility (OPR) for tracking and monitoring modification requirements through the users validation process.
- 2.1.2. Coordinate all AF Form 1067 activities with the other affected commands/agencies.
- 2.1.3. Establish and conduct a Configuration Review Board (CRB). The purpose of the CRB is to review, validate and/or certify modification requirements.
- 2.1.4. Forward validated AF Form 1067 to the SM for action.
- 2.1.5. Assist the SM in defining, planning, and budgeting for program funding (to include associated RDT&E, initial spares and technical data.)
- 2.1.6. Advocate acquiring necessary modification funding.
- 2.1.7. Participate in technical order (TO) verification, review and concur with Time Compliance Technical Order (TCTO) and TO changes after verification.

2.2. The Air Staff will:

- 2.2.1. Issue a new or modify the existing PMD for all certified/approved permanent modifications when the requirement is not included in existing program direction.
- 2.2.2. Advocate the modification in the Planning, Programming, and Budgeting System (PPBS) process.
- 2.2.3. Ensure product support for the program is budgeted (to include associated RDT&E, initial spares and technical data, etc.)
- 2.2.4. Issue required budget documentation for each modification.
- 2.2.5. Review and approve/disapprove requests for incorporating temporary (T-1) modification on greater than five (5) configured items.

2.2.6. Provide accurate and timely force structure data to the SM.

2.3. The Single Manager will:

2.3.1. Establish a means for tracking validated modification proposal through formal Configuration Control Board (CCB) approval process to modification completion.

2.3.2. Establish an Integrated Product Team (IPT) to evaluate and manage the modification proposal.

2.3.3. Conduct engineering reviews and investigations to include performing initial feasibility assessments and/or engineering studies.

2.3.4. Accomplish risk assessments in accordance with (IAW) AFMCP 63-101, "Risk Management", identifying risk in the following areas: Threat, Technology, Cost, Schedule, Engineering, Logistics, Manufacturing, and Developer's capabilities, etc.

2.3.5. Develop initial Budgetary Cost Information (BCI) estimates to include, as a minimum, assessed costs for: Research and Developmental Engineering, Simulator/Trainer requirements, Initial Aircrew and/or Maintenance Training, Trial Installation, Common and Peculiar Support Equipment, Engineering Data Changes, TCTO, and Technical Manual Change Pages/Updates, Initial Spares, Readiness Spares Package (RSP), Kit Material and Assembly, and Labor (kit unpacking, disassembly, installation, re-assembly and operational checkout/test).

2.3.6. Provide MDA recommendations. The SM will re-evaluate the MDA recommendations at each phase of the program.

2.3.7. Prepare documentation for MDA approvals and notify the MDA when the modification is complete.

2.3.8. Develop, maintain and implement a block modification strategy, if appropriate, and determine which modification block will incorporate the modification being considered.

2.3.9. Establish, prepare documentation for, and conduct a Configuration Control Board (CCB).

2.3.10. Develop a management plan encompassing all key areas and identifying the core documentation necessary for program management, execution and oversight. The management plan is a stand-alone document unless it is integrated into the Acquisition Plan/Single Acquisition Management Plan (SAMP) as required in Air Force Federal Acquisition Regulation Supplement (AFFARS) Part 5307.

2.3.11. Coordinate responsibilities for modification proposals affecting CIs managed by multiple SMs. Coordination of responsibilities will be documented in memoranda of agreement (MOA) between the affected SMs.

2.3.12. Execute the modification program and ensure that required certifications are updated as appropriate.

2.3.13. Ensure technical data changes are validated, verified and incorporated into the affected manuals in conjunction with kitproofing and prior to the start of production installation.

2.3.14. Permanently maintain modification documentation.

2.3.15. Complete a source of repair assignment (SORAP) for the modification in accordance with existing policy.

2.3.16. Ensure Command, Control, Communications, and Intelligence (C4I) systems are modified to accommodate standardization, integration, and interoperability in accordance with existing policy.

3. Modification Management.

3.1. Modification Process Flow. Permanent modification process flow with block descriptions is at [Attachment 2](#). The temporary modification process flow with block descriptions is at [Attachment 3](#). These flow charts give an in depth view of the process for modifications from start to finish.

3.2. MDA Determination. Determination of the MDA is based on a cost and correlated risk decision.

3.2.1. Using established procedures, the SM will accomplish a risk assessment on the system, product, or equipment modification and determines the levels of risk in eight key areas as listed in section 2.3.4 above.

3.2.2. Cost estimates are accomplished to determine the overall program cost, including associated costs for initial spares, comparing organic spares with Initial Spares Support (ISS). See paragraph 3.10.5 for more information on ISS. Cost estimates can be accomplished by any of the methods detailed in AFPD 65-5, *Cost and Economics*, AFPD 65-6, *Budget*, and related AFIs such as AFI 65-601, Volume 1, *Budget and Guidance Procedures*.

3.2.3. Using the correlated risk assessment methodology, the SM makes an MDA recommendation to the DAC/PEO for review/approval for the modification. All programs remain within the DAC/PEO portfolio regardless of MDA designation. The program should migrate downward in MDA as the risk declines with design, production, and use maturity. Also a program can migrate upward in MDA if risk increases.

3.3. Modification Documentation. Documentation on modifications is minimized to the basic core requirements needed to accomplish the program. These core requirements are defined as:

3.3.1. An approved need (see AFI 10-601 for specific documents and limitations).

3.3.2. An approved requirement (AF Form 1067). Instructions for completing the AF Form 1067 are at [Attachment 4](#). See AFI 10-601 to determine the appropriate requirement documentation.

3.3.3. Baselined costs, performance, and schedule parameters, and other budget documents, as required

3.3.4. CCB actions on modification proposals will be documented on AF Form 3525 or equivalent. Instructions for completing the AF Form 3525 are at [Attachment 5](#).

3.3.5. An Acquisition Plan/SAMP encompassing all key functional areas, if program costs are greater than \$10M.

3.4. Program Baseline. Cost, schedule, and technical performance parameters must be baselined for modification programs. The AF Form 3525 or equivalent should be used for the modification program baseline. The Acquisition Program Baseline (APB) is designed as a top-level overview tool. Other documents can be used if they portray the essential baseline information, meet the needs of the program, and provide a viable audit trail.

3.5. Permanent Modification Considerations. Permanent modifications to systems will include the appropriate changes to the associated support equipment, computer resources, technical data, configuration baseline documentation, and system training devices and to the spares supporting those systems or equipment items.

3.5.1. When more than one SM (including commodity SMs) is involved, the PMD will identify the responsibilities for each. Normally, the SM of the actual mission design series (MDS) being modified will be designated as the integration lead. For modification programs without a PMD, affected SMs will coordinate responsibility and coordinate a memorandum of agreement.

3.5.2. All SMs involved in the process, the lead/using command(s), and the supporting depot(s) will develop an endorsed implementation approach and schedule. Additional coordination through Air Education and Training Command (AETC) is required if trainers are affected. This approach and schedule establishes all the need dates and actions. Because real property (RP) and real property installed equipment (RPIE) are not considered a part of the weapon system, the wing Civil Engineer reviews and approves/disapproves modifications or maintenance on RP, or RPIE before work may begin, regardless of the user.

3.6. Modifications to Federal Aviation Administration (FAA) Certified Aircraft. Modifications to FAA certified Air Force aircraft shall not cause the aircraft to lose its certification. All modifications to such aircraft shall comply with AFD 62-4, "Standards of Air Worthiness for Passenger Carrying Commercial Derivative Transport Aircraft," and AFD 62-5, "Standards of Airworthiness for Commercial Derivative Hybrid Aircraft." In addition, modifications entitled "Service Bulletins" and "Aircraft Directives" should receive special consideration. Service Bulletins and Aircraft Directives are issued by the FAA or a weapon system manufacturer, and identify efforts necessary to correct FAA identified deficiencies. Such modifications are required to keep the weapon system or aircraft in compliance with FAA standards and to maintain FAA certification.

3.7. Temporary Modification Initiation. Personnel shall initiate T-1 and T-2 modifications using an AF Form 1067. The proposed modifications must be validated by the lead command CRB chairman and then forwarded to the SM for engineering approval. The lead/using command may install the modification only after SM engineering approval is received. The lead command will establish internal procedures for documenting and managing the modification. The lead/using command is responsible for all budgeting and funding of lead/using command initiated T-1/T-2 modifications, including costs to return the configured item to the original configuration.

3.8. SM Initiated Temporary Modifications (T-2 modifications only). When a SM has engineering responsibility for the item being modified, that SM shall establish internal procedures for documenting and managing the modification, including all OSS&E considerations. When a SM needs to modify a system managed by another SM, the requesting SM shall send an AF Form 1067 to the SM with engineering authority for approval. The AF Form 1067 must be coordinated with the lead command. The lead/using command is responsible for all budgeting and funding of T-2 modifications, including costs to return the configured item to the original configuration.

3.9. Programming and Budgeting. The AF Budget (P3A Documentation) is submitted in three phases, with each submission becoming progressively more defined. The three phases are Program Objective Memorandum (POM), Budget Estimate Submission (BES), and the President's Budget (PB) or Apportionment Submission. Of the three submissions, only the PB is submitted to Congress.

3.9.1. Both the POM and BES are submitted to the Office of the Secretary of Defense (OSD) and are incorporated into the overall Department of Defense (DoD) budget.

3.9.2. The POM usually provides initial funding requirements for the budget year being programmed. The BES provides a more definitive statement of budgetary requirements, updating cost and scheduling information previously submitted in the POM. The BES covers prior, current, and 2 budget years. The first 2 years of the previous POM become budget years. The PB contains all the refined requirements resulting from the POM and the BES and as modified by OSD Program Budget Decisions (PBDs).

3.9.3. All new modification requirements planned for a budget year, must be presented in the PB for that year, or special Congressional notification of planned “new starts” is required prior to initiating the modification program (reference DOD 7000.14-R, Vol. III, Chapter 6).

3.9.4. Any aircraft or missile modification will be documented using the P3A format as established and regulated by SAF/AQXR and SAF/FMBI. The general format for P3As is found in DOD 7000.14-R, Vol IIB, Chapter 4. Automated submission of P3A documentation will be via the SAF/AQXR-maintained Investment Budget Documentation System (IDOCs)

3.9.5. Mods will be fully funded, i.e., all dollars are available to procure a complete and usable end item, as outlined in DoD 7000.14-R, Vol IIA. Complete kits must be programmed each FY. If it is necessary to procure kits in more than one fiscal year to comply with phased procurement, each kit must be procured lead-time away from planned installation. Advance procurement is not authorized for mod programs unless specifically approved by Congress. Installation costs must be programmed or budgeted in the year that the kit(s) will be installed, i.e., fully financed. Complete logistics support for kit quantities must be programmed lead-time away from need. Complete support includes but is not limited to spares, support equipment, technical data, system training devices, including simulators, etc.

3.9.6. To reduce the cost of acquisition, multiple-year contracting techniques should be used to the maximum extent possible. Multiple-year techniques permit the continuation of a contractual relationship beyond the initial year. They include, but are not limited to, multiple-year contracts and single-year contracts with priced options for follow-on years. Contract should be structured so that award or option exercise fits into an appropriate schedule, taking into account whether the key awards should be tied to key milestones (in order to have leverage with the contractor), mod/kit installation schedule, prime and subcontractors rate production capability, etc.

3.9.7. The applicability of Initial Spares Support (ISS) will be evaluated for all modification programs. ISS is a nine-step, iterative process which facilitates seamless spares support and Integrated Weapon System Management concepts for spares management throughout the acquisition phases until transition to an Inventory Control Point for support. A contractor performs ISS for the period of time between initial fielding and the establishment of an organic Inventory Control Point support for the peculiar items of that modification or to maintain the same level of support through a Contractor Logistics Support function. This provides the opportunity for the government to make demand-based acquisitions of spares and not purchases based on estimates which, historically, have resulted in excess inventories of equipment that either isn't used or, due to configuration changes, is unusable. Contact SAF/AQXR for more information on ISS or visit the web site at <http://www.cisf.af.mil/rssp> .

3.9.8. P3A documentation will be used for the Congressional reporting of organic and contract costs for modification installations in the Distribution of Depot Maintenance, or the “50/50 rule”. Single managers must ensure that HQ AFMC/LG “50/50” certification is obtained prior to changing the source of repair “Method of Implementation” field on the P3A document. The reference source is Tech Manual 8601.

3.10. Modification Completion. As the modification nears completion, other tasks must be accomplished to provide an audit trail for the AF system/items/equipment involved in the modification. Proper disposal will be insured for modification kits that become excess. For configuration control and management purposes, a complete copy of the modification package will be permanently maintained IAW AFM 37-139, “Records Disposition Schedule,” tables 20-2 or 63-9, whichever is longer.

3.10.1. When a TCTO is or will be rescinded, and there are excess kits, the program managers will ensure authority is obtained to disassemble/dispose of excess kits and verify that all affected systems/items/equipment spares have been modified.

3.10.2. Technical data, which exists prior to the modification, must be retained until all affected systems/items/equipment have been modified. When the last asset has been modified, all pre-existing data must be updated by formal changes or revisions to technical data/manuals, thus ensuring the current configuration is reflected.

3.10.3. When the modification has been completed, shipping or disposition instructions for government furnished equipment/material must be provided IAW existing policies.

3.10.4. The MDA will be notified when modification kit installation has been completed and the TCTO has been rescinded. Unsuccessful completion of the modification must also be documented including the reason for termination and any plan to recover assets.

4. Forms Prescribed, AF Form 1067, *Modification Proposal* and AF Form 3525, *CCB Modification Requirements and Approval Document*

LAWRENCE J. DELANEY
Assistant Secretary of the Air Force for Acquisition

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

DoDD 4650.1, *Management and Use of the Radio Frequency Spectrum Management*

DoD 5000.2-R, *Mandatory Procedures for Major Defense Acquisition Programs (MDAPS) and Major Automated Information System (MAIS) Acquisition Programs*

DoD 7000.14-R, Vol. IIA, *DoD Financial Management Regulation (Budget Presentation and Formulation)*

AFFARS Part 5307, *Acquisition Planning*

AFPD 10-9, *Lead Operating Command Weapon Systems Management*

AFPD 62-4, *Standards of Air Worthiness for Passenger Carrying Commercial Derivative Transport Aircraft*

AFPD 62-5, *Standards of Airworthiness for Commercial Derivative Hybrid Aircraft*

AFPD 63-1, *Acquisition System*

AFPD 63-11, *Modification System*

AFPD 63-12, *Assurance of Operational Safety, Suitability & Effectiveness(OSS&E)*

AFPD 65-5, *Cost and Economics*

AFPD 65-6, *Budget*

AFI 10-601, *Mission Needs and Operational Requirements Guidance and Procedures*

AFI 21-101, *Maintenance Management of Aircraft*

AFI 33-118, *Radio Frequency Spectrum Management*

AFI 63-104, *The SEEK EAGLE Program*

AFI 63-107, *Integrated Weapon System Management Program Planning and Assessment*

AFI 63-1201, *Assurance of OSS&E*

AFI 65-601, Vol. 1, *Budget Guidance and Procedures*

AFI 91-103, *Air Force Nuclear Safety Certification Program*

AFI 91-204, *Safety Investigations and Reports*

AFMAN 37-139, *Records Disposition Schedule*

AFMCP 63-101, *Risk Management*

SAF/AQXA, *SAMP Guide*

Abbreviations and Acronyms

ATC—Air Training Center

AETC—Air Education and Training Command

AF—Air Force

AFFARS—Air Force Federal Acquisition Regulation Supplement

AFI—Air Force Instruction

ANG—Air National Guard

AFPD—Air Force Policy Directive

AFRC—Air Force Reserve Command

APB—Acquisition Program Baseline

ASP—Acquisition Strategy Panel

AST—Acquisition Support Team

BCI—Budgetary Cost Information

BES—Budget Estimate Submission

CCB—Configuration Control Board

CE—Communications Equipment

CEII—Configured End Item Identification

CI—Configuration Item

CLS—Contractor Logistics Support

COTS—Commercial-Off-The-Shelf

CPIN—Computer Program Identification Number

C4I—Command, Control, Communications and Intelligence

CRB—Configuration Review Board

DAC—Defense Acquisition Commander

DISA—Defense Information Systems Agency

DCSCI—Defense Communications Systems Configuration Items

DSN—Defense Systems Network

DoD—Department of Defense

ECP—Engineering Change Proposal

EW—Electronic Warfare

EWIR—Electronic Warfare Integrated Reprogramming

FAA—Federal Aviation Administration

FMS—Foreign Military Sales

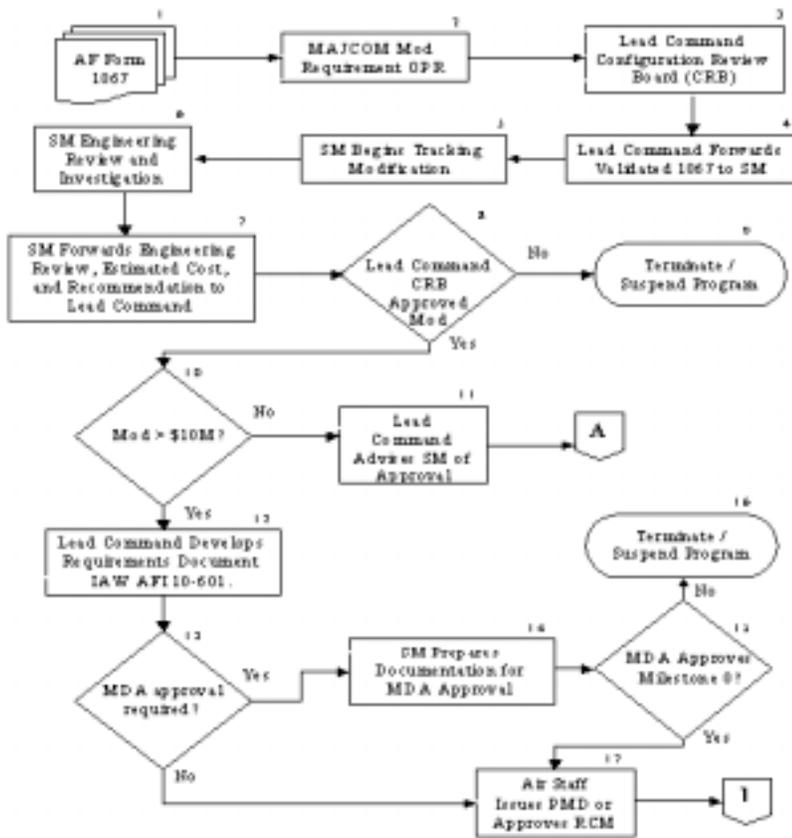
FY—Fiscal Year

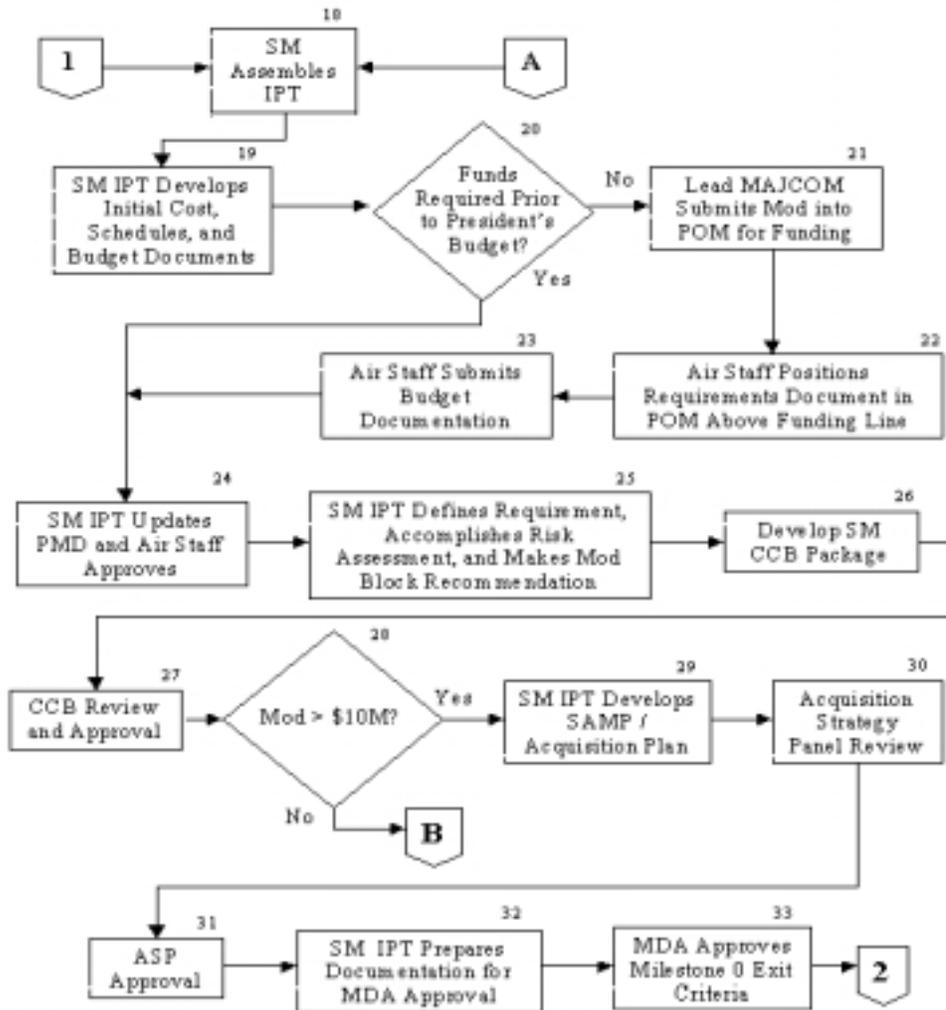
IAW—In Accordance With
IMP—Integrated Master Plan
IMS—Integrated Master Schedule
IPT—Integrated Product Team
ISS—Initial Spares Support
LRU—Line Replaceable Units
LSP—Logistic Support Priority
MAJCOM—Major Command
MDA—Milestone Decision Authority
MDS—Mission Design Series
MEIC—Mission Essentiality Identification Code
MICAP—Mission Capable
MIP—Material Improvement Project
MNS—Mission Needs Statement
MOA—Memorandum of Agreement
MSD—Material Support Division
MSO—Management Support Office
MTBMA—Mean Time Before Maintenance Actions
NDI—Non Developmental Item
NSN—National Stock Number
OCP—Organic Change Proposal
OPR—Office of Primary Responsibility
OSD—Office of the Secretary of Defense
OSS&E—Operational Safety, Suitability, & Effectiveness
PB—President’s Budget
PBD—Program Budget Decisions
PDM—Programmed Depot Maintenance
PEM—Program Element Monitor
PEO—Program Executive Officer
PMD—Program Management Directive
POC—Point of Contact
POM—Program Objective Memorandum

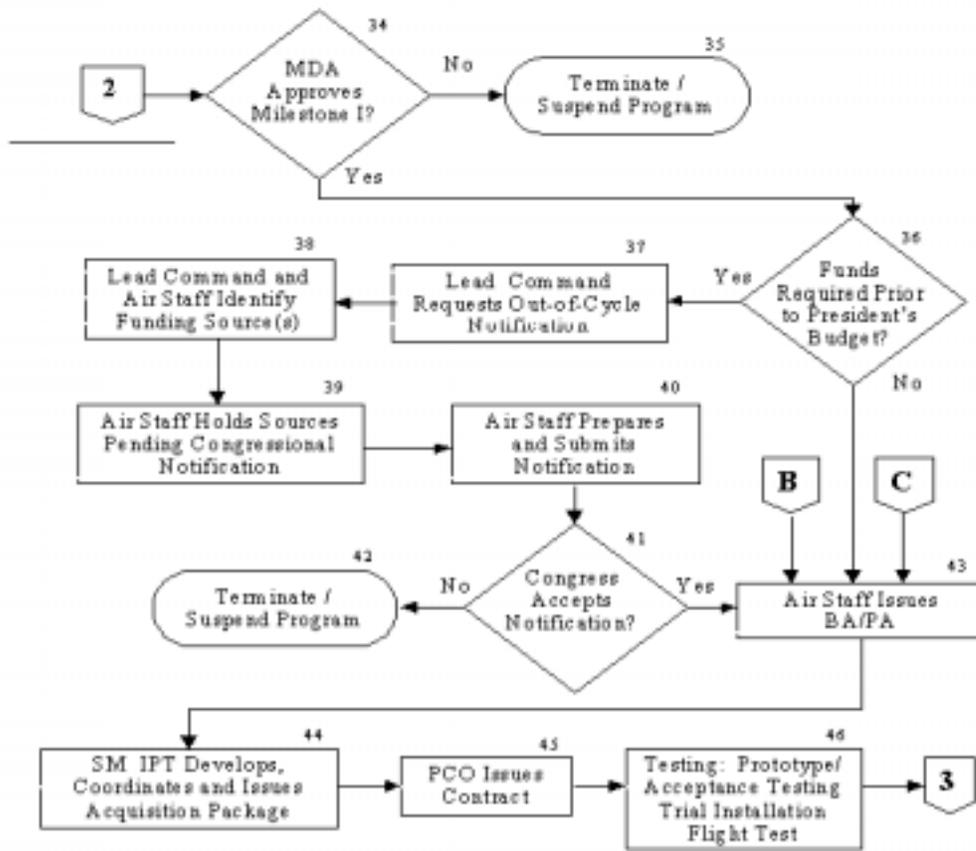
PRAM—Product Reliability and Maintainability
PPBS—Planning, Programming, and Budgeting System
RCM—Requirements Correlation Matrix
RDT&E—Research, Development, Test and Evaluation
REMIS—Reliability Maintainability Information Systems
RF—Radio Frequency
ROI—Return on Investment
ROM—Rough Order of Magnitude
RP—Real Property
RPIE—Real Property Installed Equipment
RSP—Readiness Spares Package
SAMP—Single Acquisition Management Plan
SE—Support Equipment
SECAF—Secretary of the Air Force
SM—Single Manager
SRD—Standard Reporting Designator code
TCTO—Time Compliance Technical Order
TMS—Type Mission Series
TO—Technical Order
TTC—Technical Training Center
WUC—Work Unit Code

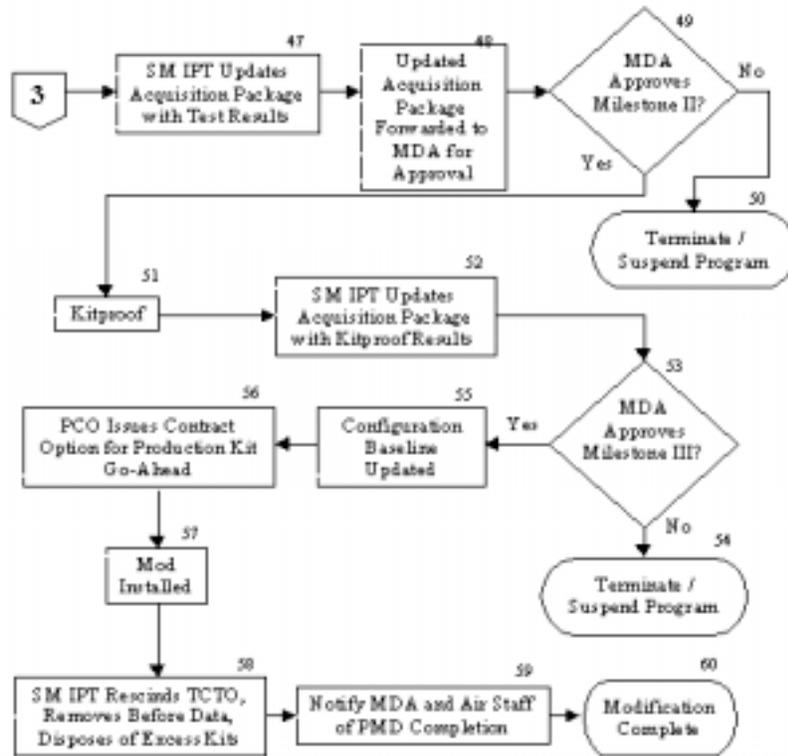
Attachment 2

PERMANENT MODIFICATION PROCESS

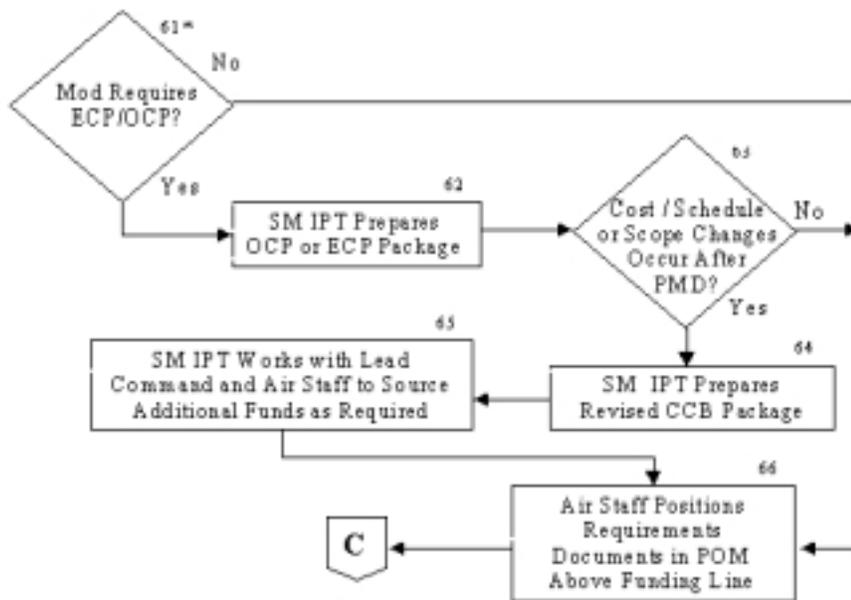








Programmatic Changes During the Permanent Modification Process



* Programmatic change can occur at any time.
Block sequence is continued only for convenience.

Although this process is shown in a sequential format, many of the blocks may be condensed and accomplished in parallel.

Block 1: AF Form 1067

Personnel submit AF Form 1067s in response to maintenance or operational problems experienced in the field or to suggest improvements to maintenance or operation. The initiator shall complete the form using the instructions at attachment 4 as a guide. The initiator shall submit the AF Form 1067 to their organization for validation. The organization shall forward the AF Form 1067 to their MAJCOM modification requirement office OPR.

Block 2: MAJCOM Mod Requirement OPR

Initiators submit the AF Form 1067 to their major command (MAJCOM) Mod Requirements OPR. If the generating MAJCOM is not the lead command for the weapon system, the AF Form 1067 will be forwarded to the lead command for processing, monitoring, tracking, MAJCOM/ Configuration Review Board (CRB), and all other associated activities. The lead command Mod Requirements OPR is responsible for coordinating all AF Form 1067 activities with other commands. The MAJCOM Mod Requirements OPR is the secretariat for the MAJCOM CRB and schedules the CRB.

Block 3: Lead Command Configuration Review Board (CRB)

The CRB will coordinate the recommended modification with all relevant command organizations, including training, supply management, safety, requirements analysis, budgeting, responsible test organization (RTO), and the weapon system action officer. The CRB reviews the AF Form 1067, determines if a material solution is required, evaluates whether the proposed modification will resolve the issue, or recommends alternative solutions. The CRB also determines if the proposal is cost prohibitive. A MAJCOM validated AF Form 1067 does not constitute authority to initiate the modification.

The lead command must validate the designation of a permanent safety mod. The SM must also coordinate that designation.

Note: The MAJCOM CRB is not the weapon system Configuration Control Board (CCB). The CCB is chaired by the SM in accordance with DoD 5000.2-R.

Block 4: Lead Command Forwards Validated 1067 to SM

After validation by the lead command CRB, the AF Form 1067 is forwarded to the appropriate Air Force Materiel Command (AFMC) center SM for engineering review and investigation. The MAJCOM will provide funding, if required, for the engineering review and investigation.

Block 5: SM Begins Tracking Mod

Upon receipt of the validated AF Form 1067, the SM begins tracking the proposed modification. A tracking system is required until formal CCB approval or program initiation. The purpose is to establish a link between the lead command AF Form 1067 and the associated acquisition activity.

Block 6: SM Engineering Review and Investigation

SM IPT conducts a preliminary engineering review and investigation concerning the feasibility and estimated cost of the proposed modification. This process should utilize the systems engineering approach and consider the entire weapon system, including both Total Ownership Cost and Operational Safety, Suitability, and Effectiveness (OSS&E). The review will also consider any joint service interface. The estimated cost, if based on a contractor Rough Order of Magnitude (ROM) or a proposal, should include a government review/approval of the estimate. A Return on Investment (ROI) calculation may also be appropriate in this package.

Block 7: SM Forwards Engineering Review, Estimated Cost, and Recommendation to Lead Command

After the SM IPT completes a preliminary engineering review and investigation concerning the feasibility and estimated cost of the proposed modification, the SM forwards the results with a recommendation to the lead command. The recommendation should include development, procurement, installation and life cycle cost impacts, potential schedule, prioritization, and impacts to capability.

Block 8: Lead Command CRB Approved Mod? If the Lead Command CRB does not certify the proposed modification, proceed to Block 9. If the lead command CRB certifies the proposed modification, proceed to Block 10.

Block 9: Terminate/Suspend Program

The lead command CRB disapproves of and terminates AF Form 1067. The Lead Command CRB notifies the SM of the decision, returns the AF Form 1067 and provides rationale for the decision along with advice on other options.

Block 10: Mod > \$10M? If the mod is less than \$10M, proceed to Block 11. If the mod is greater than \$10M, proceed to Block 12.

Block 11: Lead Command Advises SM of Approval.

Command certification/approval of the proposal is accomplished by the lead command CRB and the AF Form 1067 is sent to the SM for action. The lead command then ensures submission in the next Program Objective Memorandum (POM). If an ECP has been generated, the lead command coordinates on the ECP. Proceed to Block 18.

Block 12: Lead Command Develops Requirements Document IAW AFI 10-601

For modifications with procurement costs of more than \$10M but less than \$65M, or RDT&E costs of more than \$10M and less than \$14M, a Requirements Correlation Matrix (RCM) will be prepared along with the AF Form 1067. The Lead Command requirements principal will forward the AF Form 1067 and RCM to AF/XOR for coordination and approval. For modifications with procurement costs greater than \$65M or RDT&E costs greater than \$14M, a Mission Needs Statement (MNS) will be prepared IAW AFI 10-601 and forwarded for approval. Modification programs over \$640M will use the acquisition process as defined in DoD 5000.2-R.

The lead command must validate the designation of a safety or permanent safety mod accordingly. The SM must also coordinate that designation. Reference paragraph 1.2.4.

Block 13: MDA approval required? If the MDA does not approve the requirements document, proceed to Block 17. If the MDA approves the requirements document, proceed to Block 14.

Block 14: SM Prepares Documentation for MDA Approval

Documentation for the Milestone 0 decision is prepared and forwarded to the Milestone Decision Authority (MDA). Documentation is developed according to DoDD 5000-series guidance and includes acquisition strategies and program baselines, an integrated modification management plan, financial documents and reports, changes to program resource allocation, and programmatic impact analysis. For modifications above \$65M prepare documentation as approved by the Acquisition Strategy Panel.

For most modifications, Concept Exploration is not required and a Milestone 0 decision is not relevant. Further, many modifications are relatively straightforward and Program Definition and Risk Reduction is not necessary. In these instances, Milestone I is not relevant. The SM can recommend deleting or combining Milestones to the MDA. In these instances, the program must selectively execute the processes through Milestone II approval.

Block 15: MDA Approves Milestone 0?

The MDA will determine if Milestone 0 is approved. If no, proceed to Block 16. If yes, proceed to Block 17.

Block 16: Terminate/Suspend Program

Program is approved/terminated/suspended by Milestone 0 decision authority. The decision to terminate/suspend the program includes notifying all pertinent parties including MAJCOMs, Logistics Centers, Product Centers, affected Program Executive Officer (PEO) and Designated Acquisition Commander (DAC) offices, and SM offices. When appropriate, Weapon System Foreign Military Sales (FMS) participants should be notified of the decision. Documentation is placed in the SMs official program files.

Block 17: Air Staff Issues PMD or Approves RCM

Approval of Milestone 0 is the beginning of the Concept Exploration Phase. Program is approved by Milestone 0 decision authority. The decision to approve at Milestone 0 includes notifying all pertinent parties including MAJCOMs, Logistics Centers, Product Centers, affected Program Executive Officer (PEO) and Designated Acquisition Commander (DAC) offices, and SM offices. When appropriate, Weapon System Foreign Military Sales (FMS) participants should be notified of the decision. Documentation is placed in the SMs official program files.

The milestone review also develops exit criteria for this acquisition phase, which must be accomplished prior to the next milestone decision. Exit criteria should include cost, schedule, and performance exits. Note that performance in this case includes support as well as any Acquisition Program Baseline (APB) point estimates.

All requirements resulting in modification programs must be established in a PMD before initiating any work or obligating any funds in accordance with existing directives. Air Staff will issue a new or modify

the existing Program Management Directive (PMD) for all certified/approved permanent modifications when the requirement is not included in existing program direction. For programs greater than \$10M but less than \$65M, the Air Staff approves the AF Form 1067 and the RCM, and modifies AF budget documents.

Block 18: SM Assembles IPT

The SM assembles the IPT and establishes a material improvement project (MIP), or an engineering change proposal (ECP), or an acquisition program. Membership should include all involved MAJCOMs, engineers, equipment specialists, item managers, financial managers, test specialists, contract specialists, depot planners, if the modification will be accomplished at an AF depot, logistical specialists, contractors, other specialists as appropriate, and other services and agencies as applicable. Members can be full-time, part-time, collocated, or geographically separated.

Block 19: SM IPT Develops Initial Cost, Schedules, and Budget Documents

The IPT evolves Milestone 0 decision documentation into information suitable for formal acquisition. Documentation will include an Integrated Master Plan (IMP), Integrated Master Schedule (IMS), a formal cost estimate, and a business case analysis. SM IPT forwards documentation to the lead command.

Block 20: Funds Required Prior to Presidents Budget?

Is the scheduled start date for the modification prior to enactment of the President's Budget in which funds would have to be requested? If no, proceed to Block 21. If yes, proceed to Block 24.

Block 21: Lead Command Submits Mod into POM for Funding

The lead command then inputs the requirement into the budget process for update or submission in the next POM with a validated P3A and R2 Documentation. Air Staff begins advocating mod program funding in the PPBS.

Block 22: Air Staff Positions Requirements Document in POM Above Funding Line

The SM through the Program Element Monitor (PEM) and Management Support Office (MSO) begins working with the applicable SAF/AQ modification analyst to determine full program parameters and establish R-2, R-3 and P3A documentation. Air Staff notifies the lead command and the SM of funding priority from the Air Force Council. If the program is placed above the funding line in the Air Force POM, the draft budget documents are introduced into the procurement investment program for funding and implementation.

Block 23: Air Staff Submits Budget Documentation

Air Staff submits refined P3A documentation through SAF/FM to the Office of the Secretary of Defense (OSD) and Congress for authorization and appropriation.

Block 24: SM IPT Updates PMD and Air Staff Approves

The PMD, if required, will be updated. The PEM is responsible for staffing all PMD changes for Air Staff approval for all PMD changes. PMD will be reissued if required.

Block 25: SM IPT Defines Requirement, Accomplishes Risk Assessment, and Makes Mod Block Recommendation

The MAJCOMs will normally define the need in terms of an operational requirement. This requirement can range from increased performance to improvements in reliability or maintainability. The need is seldom defined in terms that can be contractually implemented. The SM IPT translates the MAJCOM need into a performance-based requirement where appropriate. These items range from interface standards to contract type to schedule requirements, and are linked with other contractual initiatives. Then the IPT will perform market research to determine the kinds of solutions available within the time and funding limitations provided by the MAJCOM.

Once the market research is accomplished, and the requirements document is updated, the SM IPT will perform a risk analysis. Risk analysis develops a matrix of probability of occurrence versus consequences of occurrence. Those items with a high probability of occurrence and a severe consequence are traditionally judged as high risk, although the criteria for high, medium, and low risk varies from program to program. Those items with high risk are given the most management attention. In general, the design solutions which incorporate the lowest overall program risk will be given higher preference.

Consideration should be given to consolidating modifications that affect the same subsystem or same area of the weapons system into block changes. As an example, an electrical power distribution cable could have several changes and a series of modifications would each install a different configuration, incurring unnecessary cost. As another example, several modifications could be implemented in the same area of an aircraft. Especially when the area is difficult to access, each modification will require entry and exit by the installation personnel. As a result manpower will be wasted and aircraft downtime will increase. With the exception of safety-critical or operationally-critical modifications, the program manager is encouraged to group modifications into block changes so overall kit cost can be reduced, man-hours for installation can be optimized, and weapon system downtime can be minimized. Once the recommended modification block for the new mod has been determined, a CCB package with that recommendation will be developed and approved through the CCB.

Note: Changes may occur at any point in the modification process due to cost/schedule/or scope, which will require reiteration of this block's efforts. This block is performed on modifications which do not require a change proposal, and could mean a separate new acquisition program, or a modification within scope of current organic or contractor efforts.

Block 26: Develop SM CCB Package

The SM IPT develops the decision package for the CCB. The CCB package should expand on the earlier package and reflect the updated funding, PMD revisions, refined requirements, an integrated risk assessment, and the mod block recommendation.

Block 27: CCB Review and Approval

The CCB approval results in the appropriate weapon system configuration change. If the CCB disapproves the change, the modification is returned to the lead command.

Block 28: Modification Program > \$10M?

Decision point for determining if the mod program will cost greater than \$10M. If the mod cost is greater than \$10M, then proceed to Block 32. For programs less than \$10M, the formal Acquisition Strategy Panel (ASP) process is not required; proceed to Block 43.

Block 29: SM IPT Develops SAMP / Acquisition Plan

If the mod program cost exceeds \$10M, the acquisition strategy should be documented in an acquisition plan/SAMP. The acquisition plan/SAMP is a comprehensive, integrated document that discusses all relevant aspects of a program. Acquisition Plan/SAMP policy is contained in AFFARS Part 5307.

Block 30: Acquisition Strategy Panel Review

The program acquisition strategy is reviewed and approved, or changed based upon the panel's review. SM IPT develops the program acquisition strategy. The IPT should be working with the appropriate center Acquisition Support Team (AST) to receive just-in-time training on the ASP process as well as help in setting up the required documentation, briefing, and formal ASP. The AST has a toolbox available to help with their development. The acquisition strategy should include a risk assessment, funding profiles, schedules, contract type, support plans, market research, and industry responses. The ASP consists of senior representatives from the acquisition center managing the weapon system.

Block 31: ASP Approval

The ASP decision to approve the acquisition strategy should be formally documented and included in the contract file. Residual actions should be worked with the appropriate ASP member or their office. Notification of approval should be sent to the appropriate MAJCOM, PEO/DAC/SM chain of command.

Block 32: SM IPT Prepares Documentation for MDA Approval

Documentation for the Milestone I decision is prepared by the SM IPT and forwarded to the Milestone Decision Authority (MDA). Documentation is developed according to DoD 5000-series guidance and includes acquisition strategies and program baselines, an integrated modification management plan, financial documents and reports, changes to program resource allocation, and programmatic impact analysis.

Block 33: MDA Approves Milestone 0 Exit Criteria

Exit criteria for Milestone 0 is approved by the MDA. Exit criteria should include cost, schedule, and performance exits. Note that performance in this case includes support as well as any Acquisition Program Baseline (APB) point estimates.

Block 34: MDA Approves Milestone I?

The MDA will determine if Milestone I is approved. If no, proceed to Block 35. If yes, proceed to Block 36.

Block 35: Terminate/Suspend Program

Program is approved/terminated/ suspended by Milestone I decision authority. The decision to terminate/ suspend the program includes notifying all pertinent parties including MAJCOMs, Logistics Centers,

Product Centers, affected PEO and DAC offices, and the SM offices. When appropriate Weapon System FMS participants should be notified of the decision. Ensure the MAJCOM annotates the AF Form 1067, and documentation is placed in the SMs official program files.

Block 36: Funds Required Prior to Presidents Budget?

Is the scheduled start date for the modification prior to enactment of the President's Budget in which funds would have to be requested? If no, proceed to Block 43. If yes, proceed to Block 37.

Block 37: Lead Command Requests Out-of-Cycle Notification.

The lead command contacts the PEM/MSO and requests Congressional Notification of an "out-of-cycle" New Start modification.

Block 38: Lead Command and Air Staff Identify Funding Sources.

The SM/lead command with the MSO, PEM, and SAF/AQ modification analyst determine the funding source(s) for realignment or reprogramming to the proposed modification.

Block 39: Air Staff Holds Sources Pending Congressional Notification.

Once sources have been identified and agreed upon for funding the "out-of-cycle" new start modification, the SAF/AQ modification analyst places those sources in a "Hold" status, pending Congressional Notification.

Block 40: Air Staff Prepares and Submits Notification.

The PEM prepares and submits through SAF/AQXR to SAF/FMBI and SAF/LLW the information necessary to prepare the notification package. Based on the dollar threshold, either a Letter of Notification or a DD Form 1415-2, "Notification Reprogramming," will be submitted to the appropriate congressional committees. (Note: Contact SAF/AQXR to determine the criteria and exceptions regarding Congressional Notifications.)

Block 41: Congress Accepts Notification?

If no, proceed to Block 42. If yes, proceed to Block 43.

Block 42: Terminate/Suspend Program.

If Congress does not accept the "out-of-cycle" notification, the PEM notifies the lead command. The lead command will then decide to either cancel the proposed modification or revise and revive that modification through the normal process. If the decision is to revise and revive, then the process begins again at Block 19 above.

Block 43: Air Staff Issues BA/PA

Approval of Milestone I is the beginning of the PDRR Program Phase. Air Staff issues program authorization and budget authorization for program execution. Modification installation funds for depot-level

must be obligated in accordance with approved SORAP or HQ AFMC/LG 50/50 certification. Single Managers must ensure that HQ AFMC/LG “50/50” certification is obtained prior to changing the source of repair and the “method of implementation” field.

Milestone I is the Demonstration Validation Program Phase. Program is approved by Milestone I decision authority. The decision to approve the program includes notifying all pertinent parties including MAJCOMs, Logistics Centers, Product Centers, affected PEO and DAC offices, and the SM offices. When appropriate, Weapon System FMS participants should be notified of the decision. Ensure the MAJCOM annotates the AF Form 1067, and documentation is placed in the SM official program files.

The Milestone review also develops exit criteria for this acquisition phase that must be accomplished prior to the next Milestone decision. Exit criteria should include cost, schedule, and performance exits.

Note that performance in this case includes support as well as any Acquisition Program Baseline (APB) point estimates.

Block 44: SM IPT Develops, Coordinates and Issues Acquisition Package

The acquisition can be either organic or contract. The acquisition package includes a Request For Proposal and the documents necessary to perform a source selection to choose a contract source. If organic the acquisition package includes the details necessary for an organic organization to execute work.

For all aircraft/missile modifications, the SM IPT shall assure that modification data is input into the long-range workload and spares requirements computation.

Block 45: PCO Issues Contract

The Procurement Contracting Officer (PCO) issues the contract. Note that a contract may be with a private or public company/organization. If organic the contract may be an informal work plan/package. Sometimes no testing is required, and kit proofing and kit procurement begin. When this is the case, the process moves to Block 51. In rare cases, testing and kit proofing are not required (the SM must make this determination), in which case progression is from Block 45 directly to Block 56.

Block 46: Testing - Prototype/ Acceptance Testing, Trial Installation Flight Test

The test should follow the plans laid out in the Test and Evaluation Master Plan (TEMP). The test should provide information to assess Operational Safety, Suitability, and Effectiveness (OSS&E). Note that for commercial aircraft the Federal Aviation Administration (FAA) certification may be utilized and any modifications to these aircraft/weapon systems must consider FAA certification impacts. Testing needs to address both FAA certification, any other affected certification, and OSS&E where applicable.

Block 47: SM IPT Updates Acquisition Package with Test Results

The acquisition package is updated with the results of the Prototype/Acceptance Testing, Trial Installation, and Flight Test. Results may cause additional modifications, which may start the process over again.

Block 48: Updated Acquisition Package Forwarded to MDA for approval

The updated acquisition package is forwarded to the MDA for approval/disapproval.

Block 49: MDA Approves Milestone II?

The MDA will determine if Milestone II is approved. If no, proceed to Block 50. If yes, proceed to Block 51.

Block 50: Terminate/Suspend Program

Program is approved/terminated/suspended by Milestone II decision authority. The decision to terminate/suspend the program includes notifying all pertinent parties including MAJCOMs, Logistics Centers, Product Centers, affected PEO and DAC offices, and SM offices. When appropriate Weapon System FMS participants should be notified of the decision. Ensure the lead command annotates the AF Form 1067, and documentation is placed in the SMs official program files.

Block 51: Kitproof

Approval of Milestone II is the beginning of the Engineering Manufacturing Development phase. Program is approved by Milestone II decision authority. The decision to approve the program includes notifying all pertinent parties including MAJCOMs, Logistics Centers, Product Centers, affected PEO and DAC offices, and SM offices. When appropriate Weapon System FMS participants should be notified of the decision. Ensure the lead command annotates the AF Form 1067, and documentation is placed in the SM official program files.

The Milestone review also develops exit criteria for this acquisition phase that must be accomplished prior to the next Milestone decision. Exit criteria should include cost, schedule, and performance exits. Note that performance in this case includes support as well as any Acquisition Program Baseline (APB) point estimates.

If the Milestone II is approved, kit proofing begins. Kit proofing is accomplished to verify form, fit, and function of the kit hardware and software, validate man-hour requirements, and verify TCTO and TO changes. The SM should ensure that the full kit, to include both the A and B portions, are available for kit proofing.

Block 52: SM IPT Updates Acquisition Package with Kit proof Results. The acquisition package is updated with the results of the kit proofing, and forwards to MDA for approval. Again additional changes may start the modification process over again.

Block 53: MDA Approves Milestone III?

The MDA will determine if Milestone III is approved. If no, proceed to Block 54. If yes, proceed to Block 55.

Block 54: Terminate/Suspend Program

Program is approved/terminated/suspended by Milestone III decision authority. The decision to terminate/suspend the program includes notifying all pertinent parties including MAJCOMs, Logistics Centers, Product Centers, affected PEO and DAC offices, and SM offices. When appropriate Weapon System FMS participants should be notified of the decision. Ensure the lead command annotates the AF Form 1067, and documentation is placed in the SMs official program files.

Block 55: Configuration Baseline Updated

Approval of Milestone III is the Production Decision for the acquisition. Program is approved by Milestone III decision authority. The decision to approve the program includes notifying all pertinent parties including MAJCOMs, Logistics Centers, Product Centers, affected PEO and DAC offices, and SM offices. When appropriate Weapon System FMS participants should be notified of the decision. Ensure the lead command annotates the AF Form 1067, and documentation is placed in the SM's official program files.

Once the production decision is made either the government or the contractor will have and maintain a weapon system configuration baseline. This is important in maintaining support (buying spares, maintenance, Technical Orders, demilitarization). Changes to configurations due to modifications must be documented for future support needs, even if the modification is minor, or specific to a particular item or model.

Block 56: PCO Issues Contract Option for Production Kit Go-Ahead

Production Kit Contract Option exercised by the PCO. Kits are procured via a phased approach for incorporation into the end item. Care should be taken by the SM to ensure that Budget Code 8 items required for modifications are properly funded and accounted for. If items are procured directly through a vendor (outside the Material Support Division (MSD)), an aggregation account must be established to prevent capitalization of these assets into the MSD inventory.

Block 57: Mod Installed

Modifications can be accomplished in several ways. Some are incorporated on the flight line via a TCTO. Other modifications are incorporated during Programmed Depot Maintenance (PDM). Still others are incorporated during system production. The personnel incorporating the modification can be flight-line personnel, organizational and intermediate maintenance personnel, depot field teams, or contractor support teams. Often modifications are incorporated using several of these methods.

Block 58: SM IPT Rescinds TCTO, Removes Before Data, Disposes of Excess Kits

Following installation of modification, the SM ensures the TCTO is rescinded as appropriate, and excess material and kits are properly salvaged or disposed.

Block 59: Notify MDA and Air Staff of PMD Completion:

SM notifies the PEO/DAC, Air Staff, and the MDA that the modification has been completed and that all PMD requirements have been met.

Block 60: Modification Complete

The SM ensures final documentation is completed and contracts are closed. A history file of the modification should be established and maintained for at least the life of the system.

Block 61: Mod Requires ECP/OCP?

The SM determines if the modification will be accomplished organically (Organic Change Proposal (OCP)) or contractually (ECP). This will determine the level of data required, schedule and cost impacts. If no, proceed to Block 66. If yes, proceed to Block 62.

Block 62: SM IPT Prepares Change Proposal Package

Organic/Contract approach package is prepared. The SM IPT coordinates with the simulator/trainer organization, MAJCOMs, other services as applicable, and other relevant organizations (financial management, ALCs, etc.). (See DoD 5000.2-R for guidance)

Block 63: Cost/Schedule or Scope Changes Occur After PMD?

Many modification programs take several years to accomplish. Often operational needs will change. In addition, funding or schedule issues will cause changes significant enough to alter requirements and associated documentation (PMD, ORD, MNS, etc.). These changes may occur often during the modification process. If yes, proceed to Block 64. If no, proceed to Block 66.

Block 64: SM IPT Prepares Revised CCB Package

Significant program changes are reflected in the CCB package. Organic/Contract approach package is prepared or updated. The Engineering Change Proposal or Operational Change Proposal process should be followed, including documentation and coordination. The SM IPT coordinates the revised package with the simulator/trainer organization, lead command, other services as applicable, and other relevant organizations (financial management, ALCs, etc.). (See DoD 5000.2-R for guidance)

Block 65: SM IPT Works with Lead Command and Air Staff to Source Additional Funds as Required

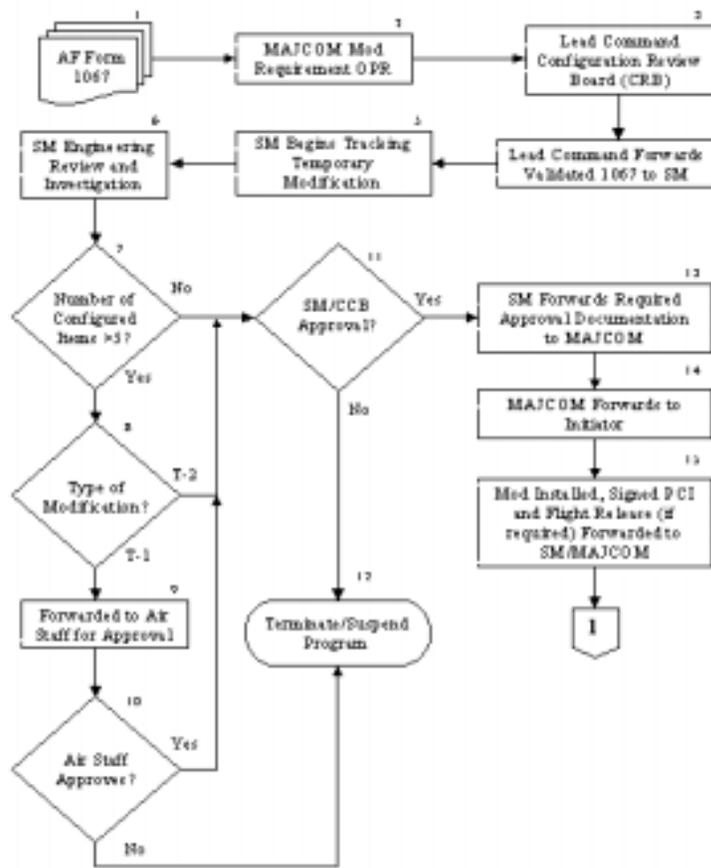
Based on the CCB documentation, if changes in the funding profile are required, the lead command and Air Staff will ensure changes are made or reprogrammed and P3A budget documentation is changed accordingly.

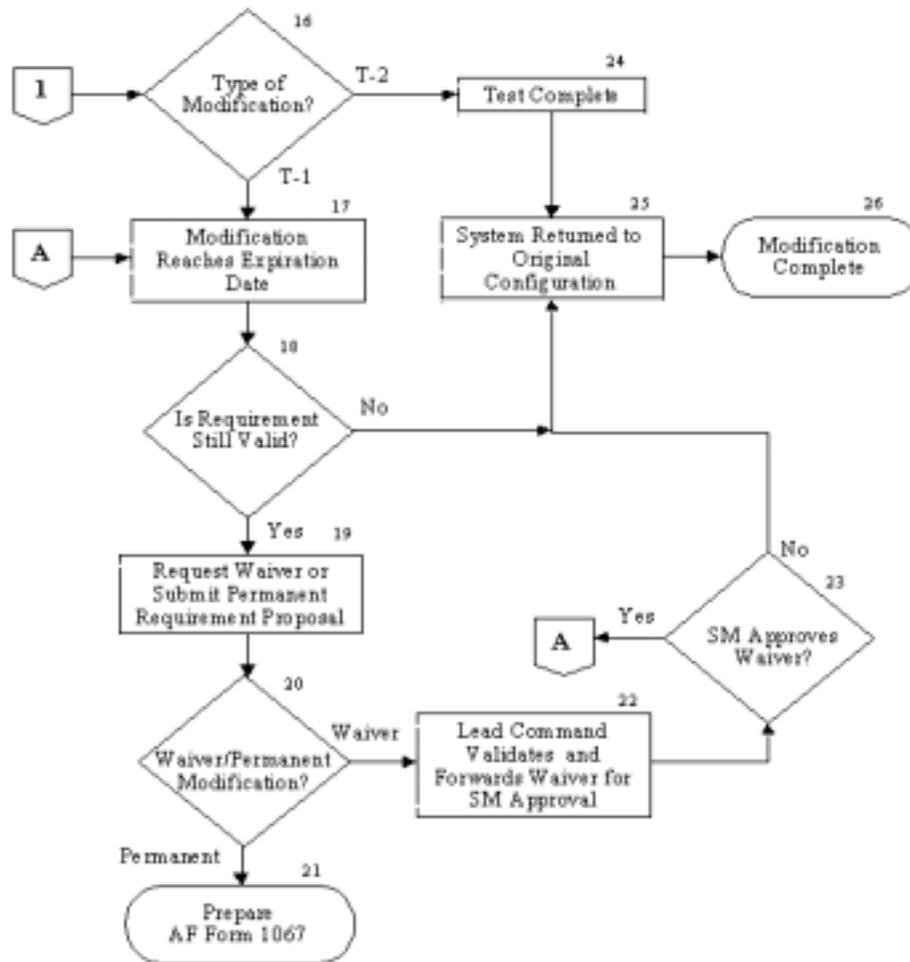
Block 66: Air Staff Positions Requirements Document in POM Above Funding Line

SM through the Program Element Monitor (PEM) and Management Support Office (MSO) works with the appropriate Air Staff modification analyst to develop the course of action for reprogramming, aligning, or sourcing the revised modification program. If additional funding is sought in the budget submission, the Air Staff notifies the lead command and the SM of funding priority and status from the Air Force Council. Once the appropriate funding has been sourced and necessary approval has been obtained, P3A documentation is updated to reflect the changes, and a new PA/BA will be issued.

Attachment 3

TEMPORARY MODIFICATION PROCESS





Block 1: AF Form 1067

Personnel submit AF Form 1067s in response to maintenance or operational problems experienced in the field or to suggest improvements to maintenance or operation. The initiator shall complete the form using the instructions at attachment 4 as a guide. The initiator shall submit the AF Form 1067 to their organization for validation. The organization shall forward the AF Form 1067 to their MAJCOM modification requirement office OPR. The AF Form 1067 will be submitted as a class T-1 or class T-2 as described in paragraph 1.1.

Block 2: MAJCOM Mod Requirement Office of Primary Responsibility (OPR)

Initiators submit the AF Form 1067 to their major command (MAJCOM) Mod Requirements OPR. If the generating MAJCOM is not the lead command for the weapon system, the AF Form 1067 will be forwarded to the lead command for processing, monitoring, tracking, MAJCOM/Configuration Review Board (CRB), and all other associated activities. The lead command Mod Requirements OPR is responsible for coordinating all AF Form 1067 activities with other commands. The MAJCOM Mod Requirements OPR is the secretariat for the MAJCOM CRB and schedules the CRB.

Block 3: Lead Command Configuration Review Board (CRB)

The CRB will coordinate the recommended modification with all relevant command organizations, including training, supply management, safety, requirements analysis, budgeting, responsible test organization (RTO), and the weapon system action officer. The CRB reviews the AF Form 1067, determines if a material solution is required, evaluates whether the proposed modification will resolve the issue, or recommends alternative solutions. The CRB also determines if the proposal is cost prohibitive. A MAJCOM validated AF Form 1067 does not constitute authority to initiate the modification.

The lead command must validate the designation of a permanent safety mod. The SM must also coordinate that designation.

Note: The MAJCOM CRB is not the weapon system Configuration Control Board (CCB). The CCB is chaired by the SM in accordance with DoD 5000.2-R.

Block 4: Lead Command Forwards validated AF Form 1067 to Single Manager (SM)

After validation by the lead command CRB, the AF Form 1067 is forwarded to the appropriate Air Force Material Command (AFMC) center SM for engineering review and investigation.

Block 5: SM Begins Tracking Temporary Modification

Upon receipt of the validated AF Form 1067, the SM begins tracking the proposed modification. A tracking system is required until formal CCB approval or program initiation. The purpose is to establish a link between the lead command AF Form 1067 and the associated acquisition activity.

Block 6: SM Engineering Review and Investigation

SM IPT conducts a preliminary engineering review and investigation concerning the feasibility and estimated cost of the proposed modification. This process should utilize the systems engineering approach

and consider the entire weapon system, including OSS&E. The review will also consider any joint service interface.

Block 7: Number of Configured Items > 5?

If the number of configured items, go to Block 8. If not, go to Block 11.

If the number of affected configuration items, for class T-1 modifications, is greater than five the Lead Command will seek approval, from HQ USAF/ILM, to expand applicability IAW AFI 21-101.

Note: The SM has the authority to expand applicability to more than five configuration items for T-2 modifications.

Block 8: Type of Modification?

If the mod is a T-1 modification, go to Block 9. If the mod is a T-2 modification, go to Block 11.

Block 9: Forwarded to Air Staff for Approval.

SM IPT forwards to HQ USAF/ILM for approval/disapproval to expand the five-configuration item limit in accordance with AFI 21-101.

Block 10: Air Staff Approves?

HQ USAF/ILM reviews and approves/disapproves request to expand the five configuration item limitation. HQ USAF/ILM shall forward approval/disapproval to the lead command and SM IPT. If approved, go to Block 11. If disapproved, go to Block 12.

Block 11: SM CCB Approval?

The SM or his designee chairs the CCB. Membership should include the lead command, RTO, other services, engineering, financial management, contract specialist, logistical specialists, CCB secretary, and other specialists as appropriate. CCB approval results in the appropriate temporary change to the weapon system configuration. If the CCB disapproves the change, the modification is returned to the lead command. If yes, continue to Block 13. If no, go to Block 12.

Block 12: Terminate/Suspend Program

Program is terminated/suspended by decision authority. Termination includes notifying all pertinent parties, using MAJCOMs, initiating organization, and initiator. Ensure that whatever system is tracking the 1067 is annotated, and documentation filed.

Block 13: SM Forwards Required Approval Documentation to Lead Command

Upon approval, the SM shall forward appropriate approval documentation to the lead command for inclusion in the configuration item records. Documentation may consist of the Air Force Form 1067, *Requirements Proposal*, or other similar MAJCOM level form (signed by SM or designated appointee).

Block 14: Lead Command Forwards to Initiator

The lead command shall forward all applicable documentation back to the originator, RTO, using MAJCOM, and other agencies as deemed necessary.

Block 15: Mod Installed, Signed Physical Configuration Inspection (PCI) and Flight Release (if required) Forwarded to SM and MAJCOM

A qualified person or agency installs modification. A qualified individual, not involved with the installation, will accomplish the PCI and Flight Release if required. Completed documentation will be maintained with the configuration item. Copies of this installation documentation will be forwarded to the lead command and SM.

Block 16: Type of Modification?

Is modification type class T-2, go to Block 24. If the mod is a T-1, go to Block 17.

Block 17: Modification Reaches Expiration Date

Class T-1 modifications are valid for one year or as designated by the SM or designated appointee. Within 60 days of this expiration date the lead command shall determine if the requirement is still valid.

Block 18: Is Requirement Still Valid?

The lead command shall coordinate with the originating organization to determine whether the requirement is still valid. If the requirement is no longer valid, go to Block 25, else go to Block 18.

Block 19: Request Waiver or Submit Permanent Requirement Proposal

The lead command shall coordinate with the originating organization to determine whether a waiver to the expiration date is required, if the modification change should be installed permanently, or if the modification should be removed.

Note: The waiver should be submitted at least 60 days prior to the expiration date to allow sufficient coordination between the originating organization, lead command, SM, and other applicable agencies.

Block 20: Waiver/Permanent Modification?

If a waiver is required, go to Block 22. If not, go to Block 21.

Block 21: Prepare AF Form 1067

The originator shall submit a permanent AF Form 1067 to the lead command for processing as a permanent modification as outlined in attachment 2. The initiator shall complete the form according to the instructions at attachment 4.

Block 22: Lead Command Validates and Forwards Waiver for SM Approval

The validated waiver shall be forwarded by the lead command to the SM for approval/disapproval.

Block 23: SM Approves Waiver

The SM IPT shall evaluate the request, disapprove waiver, recommend a new AF Form 1067 be submitted as a permanent modification, or approve the waiver. If disapproved, proceed to Block 25. If approved, the SM shall forward approval documentation (with a new expiration date) to the lead command, and proceed to Block 17.

Block 24: Test Complete (Class T-2 Only)

Test is complete and RTO or RTA sends an end of test message to the lead command, SM, and other applicable agencies.

Block 25: System Returned to Original Configuration

The system is returned to its original configuration upon completion of test, expiration date, or direction from lead command or SM. PCI documentation for removal action is forwarded to lead command and SM IPT.

Block 26: Modification Complete

For T-2 Modifications the RTO notifies MAJCOMs, SM, and applicable agencies of test modification completion.

For T-1 Modifications the initiating organization notifies MAJCOMs, SM, and applicable agencies of completion of modification.

Attachment 4**AF FORM 1067 BLOCK DESCRIPTIONS**

PART I, REQUEST FOR ACTION. Blocks 1-10 are completed by the initiator and block 11 is completed by the submitting organization's approval authority.

Page: Enter the appropriate number pages (total) in the submission.

Date: Enter the date of form initiation.

Block 1 Initiator Information: Enter the name, grade, office symbol, mailing address and Defense Switching Network (DSN) number of the initiating individual.

Block 2 Initiator's POC Organization Information: Enter the mailing address and DSN of the submitting organization's point of contact (POC) for AF Forms 1067 (normally the unit product improvement manager).

Block 3 Using Command HQ POC Information: Enter the office symbol, mailing address, and DSN of the initiators Using Command/agency headquarters (HQ) POC for processing AF Forms 1067.

Block 4 Title: Enter the title that best defines/describes the addressed need/requirement.

Block 5 Organization Control Number: Enter the control number assigned by the submitting organization's POC. If none, leave blank.

Block 6 Other Numbers: Use this block to enter any other identifying number as appropriate. If none, leave blank. (Note: time compliance technical order (TCTO), material improvement program (MIP), engineering change proposal (ECP) and modification (Mod) numbers are entered in block 24.)

Block 7 Affected Configured Item/Systems:

A. Enter the Mission Design Series (MDS), Type Mission Series (TMS), or the Configured End Item Identification (CEII) for other weapon systems (i.e., AN/APN-59, or Computer Program Identification Number (CPIN)), as appropriate.

- 1.** If all series of the system are affected, cite only the Mission and Design: (i.e. F-15)
- 2.** If all MDS's will not fit, show the one with the highest logistic support priority (LSP) in this block and list all other MDS on bond paper and attach on continuation page.
- 3.** If the modification affects multi-systems, enter the system that has the highest LSP and list all other weapon systems or end items affected by the modification on plain bond paper and attach on continuation page.

B. Enter work unit code (WUC) of affected configuration item (CI).

- C. Enter national stock number (NSN) of affected CI.
- D. Enter standard reporting designator code (SRD), as applicable.
- E. Enter nomenclature (NOUN) of affected CI.
- F. Use other to specify any additional identifier as needed.

Block 8 Purpose: State the deficiency to be corrected or the need to be satisfied by the proposal and what the expected result will/should be.

Block 9 Impact: State the impact of not correcting the deficiency or satisfying the need specified in block 8. If known by field level initiators or if form is initiated by SM personnel, include:

A. Current and projected mean time before maintenance actions (MTBMA)-Mission Essentiality Identification Code (MEIC) for all affected line replaceable units (LRU) (For engines: MEIC for all recoverable items affected by mod at highest indenture level below engine.) (MEIC is applicable to all but structural mods.)

B. Number of mission capable (MICAP) hours, both current and projected, if applicable.

C. Current unscheduled removal rate of equipment, and projected removal rate after mod, if applicable.

D. Current or projected mission aborts (before flight aborts, in flight aborts, or total aborts - per assigned MDS sortie generation requirements).

E. If unmodified system LRUs are resulting in excessive maintenance hours and/or extravagant spares requirements, show estimated number of maintenance hours being expended (with dollar value of those hours shown in parenthesis) and/or dollar value of excess spares requirement, to include one year's demand history to reflect increased spares consumption.

NOTE: Much of this data can be found in existing automated data systems (i.e. consolidated aircraft maintenance system (CAMS)/reliability maintainability information systems (REMIS) or G081).

F. Ensure that your words support your requirement.

G. Show the numerical equivalent (how many, how much, how often). Avoid the use of such terms as: excessive, enormous, numerous, many, frequent, several, few, moderate, considerable, often, seldom, appear, - when describing either the extent of the deficiency/problem or when relaying the degree of improvement expected or the anticipated benefits to be derived from the modification.

Block 10 Constraints/Assumptions/Proposed Solutions: State proposed solutions, constraints and/or assumptions. Attach copies of sketches, drawings, diagrams, etc. If being completed by SM personnel, the following information should be included. (You are not limited to just this information.):

A. Development Status - If an ECP has been received, give date received or if an operational change proposal (OCP) is being developed, give status. If product reliability and maintainability (PRAM) related engineering has been accomplished, explain here. If no ECP/OCP required, state why. State whether flight test is required and, if required, anticipated length of time required.

B. Contracting Requirements - State whether mod will be contractually procured or organically assembled or a combination of the two. If contract will be sole source, give contractor's name.

C. Risk Factor - Identify areas of risk associated with the proposed requirement with emphasis on highest risk.

Block 11 ORGANIZATION VALIDATION: The individual designated/authorized to validate the proposal for further processing will check the appropriate block (A thru C), and completes blocks D thru F.

DATE RECEIVED: Enter the date the proposal is received by the organization valuator.

- A. Proposed request approved, forward for using command validation.
- B. Proposed request disapproved, forward to initiator POC.
- C. Proposal returned to initiator POC for additional information.
- D. Enter the date signed.
- E. Type or print name, grade, title, DSN of validating official or designated representative.
- F. Signature of organization validating official or designated representative.

PART II, USING COMMAND VALIDATION: Block 12 is to be completed by Using Command/Air National Guard (ANG) or equivalent agency headquarters personnel. If the Using Command/agency is the lead command, proceed to Part III, Block 13.

DATE RECEIVED: Enter the date the proposal is received from the initiating organization.

Block 12 USING COMMAND VALIDATION: The individual designated/authorized to validate the proposal for further processing will check the appropriate block (A thru C) and complete blocks D thru H.

- A. Proposed request approved, forward for Using Command/agency validation.
- B. Proposed request disapproved. If disapproved, rationale for this decision must be returned to the originating organization.
- C. Proposal returned to initiator POC for additional information.
- D. If the Using Command/agency is not the lead command for the affected weapon system/CI, check this block and forward to the appropriate lead command. See AFD 10-9 for listing of assigned weapon system lead commands.
- E. Enter Using Command/agency tracking number.
- F. Enter the date signed.
- G. Type or print name, grade, title, DSN of Using Command/agency CRB chairperson, or designated representative.
- H. Signature of Using Command/agency CRB chairperson or designated representative.

PART III – LEAD COMMAND VALIDATION: Blocks 13 – 22 are completed by lead command Headquarters' Personnel IAW applicable policies.

DATE RECEIVED: Enter the date the proposal was received from the Using Command/agency.

Block 13 Lead Command Action Officer: Enter the name, grade, office symbol, mailing address, and DSN of the evaluating action officer.

Block 14 Thru (Optional Routing): Enter the mailing address for other Using Commands/agencies as applicable.

Block 15 Single Manager Office: Enter the office symbol, mailing address, and DSN of the SM POC for processing AF Forms 1067.

Block 16 Modification Type: Mark one of the appropriate blocks to identify the proposed type of modification (see page 1 of this document for description of modification types).

Block 17 Lead Command Control Number: Enter the tracking control number.

Block 18 Lead Command Remarks: Enter any known constraints or assumptions that must be addressed during the next level(s) of evaluation.

Block 19 Lead Command Validation Authority: The individual designated/authorized to validate the proposal will check the appropriate block.

A. Validated Request: Proposal is a valid need/requirement.

B. Disapproved Request: Proposal is not a valid need/requirement. If disapproved, rationale for this decision must be returned to the Using Command/agency or originating organization.

Block 20 Type or print name, grade, title, DSN of lead command CRB Chairperson, or designated representative.

Block 21 Signature of lead command CRB Chairperson, or designated representative.

Block 22 Enter the date signed.

PART IV, SINGLE MANAGER REVIEW AND APPROVAL. Blocks 23 - 42 are completed by the SM.

Date Received: Enter the date the proposal was received from the lead command.

Block 23 SM Action Officer Info: Enter the name, grade, office symbol, mailing address and DSN of the SM evaluating action officer.

Block 24 Center Control Numbers: Enter assigned numbers, if applicable. If none assigned, leave blank. Enter any other applicable identifier(s) as a continuation of this block on bond paper as an attachment to this document.

A. Center MIP No:

B. ECP No:

C. TCTO No:

Block 25 Total BP/EEIC: Enter the total estimated cost by appropriation budget codes. (Example: \$3.5M BP1100, \$4.5M BP2100, \$1.0M 3400, \$.5M 0350, EEIC 583, etc)

Block 26 Nr of CIS Affected: Enter the total number of configured items to be modified (i.e. black boxes, aircraft, etc.).

Block 27 Total Kits Needed: Enter the total number of kits or applicable units proposed, including spares.

Block 28 Also Affects: Check the appropriate block for each affected item (for permanent modifications only). Identify each affected supporting system on a continuation sheet (for example, when training aids are affected, provide trainer flight equipment number, maintenance trainer identifying number, and part number as applicable.). If "OTHER" is checked, identify any significant impacts not otherwise covered here and explain on a continuation sheet. When system-training devices (STDs) are affected, provide on a continuation sheet, the information needed as it relates to the mod of the applicable STDs.

Support Equipment:

Aircrew Training:

Training Devices/Visual Aids (Maint):

Tech Data:

Spares:

Software:

Other:

If STDs are not affected, include on continuation page the appropriate certification (indicate why mod to STDs is not desired or needed) and include certifying official's name, grade, and office symbol.

Note: STD is an all encompassing term. It refers to mission simulators, flight simulators, aircrew or missile crew or cockpit procedures trainers, as well as maintenance training devices, visual aids, simulation devices, operational support equipment, spares, and video tapes, etc.; included in mobile maintenance training sets used to support the field training detachments, and resident training equipment that must be maintained to reflect related weapon systems or equipment configuration. Complete staffing and coordination are required to determine if the supporting systems are affected.

Block 29 Kit or Unit cost: Enter the cost for a single kit (group A/B only).

Block 30 Total Cost: Enter the total estimated cost of the proposed solution as outlined in the BCI.

Block 31 Lead Time: Enter the estimated engineering and kit acquisition lead-time. Compute lead-time by totaling initial admin and initial production estimates: (Entries to be in months)

A. Initial Admin: The number of months from initiation of the PR or kit assembly requirement to contract award date or obligation acceptance by the appropriate directorate.

B. Initial Production: The number of months from contract award date or document obligation/ acceptance date through the date of completion of the kit proofing process.

Block 32 Installation: Begin and complete: Enter the dates, by FY and quarter (YYYY/QTR), for projected initiation of production installs and completion of final installations.

Block 33 Level of Accomplishment: Check the appropriate block indicating the recommended level of accomplishment (i.e., user (organizational), depot (organic or contract) or both (both is to be used if the commodity will be modified at depot level and installed into the aircraft or major end item by the user or organizational level). If "OTHER" identify specifics in block 39 or on attached continuation sheet.

Block 34 User Work Hrs: Enter the number of estimated user man-hours needed to perform the mod on one CI.

Block 35 Depot Work Hrs: Enter the number of estimated depot man-hours needed to perform the mod on one CI.

Block 36 Total Work Hrs: Enter the number of estimated man-hours needed to accomplish the modification on all CI's.

Block 37 Manufacturer: Enter the name of the manufacturer. This normally applies when an ECP is involved, since the ECP is prepared by the manufacturer. If unknown, leave blank.

Block 38 Aircraft Breakout: Indicate number of CI's broken down by Commands/agencies (i.e. AMC, ACC, AETC, AFSOC, AFRC, ANG, etc.)

Block 39 Engineering review recommendation(s): Provide adequate justification appropriate with engineering evaluation decision.

For proposals which have approved engineering solutions, the SM will provide enough detail for the lead command to make an assessment of the proposed solution for lead command certification.

The SM or designated representative will check the appropriate block indicating approval or disapproval of the SM review. If disapproved, the SM will provide the lead command with rationale for this decision.

Note: For permanent modifications, SM approval does not constitute authorization to install the modification until funded and lead command approval to proceed (blocks 44 thru 48).

Block 40 Type or print name, grade, title, DSN of the SM or designated representative.

Block 41 Signature of the SM or designated representative.

Block 42 Enter the date signed.

PART V, LEAD COMMAND CERTIFICATION. Blocks 43 – 47 are to be completed by the lead command that is assigned the responsibility for the applicable affected configured item(s).

The lead command CRB Chairperson or designated representative will check the appropriate block indicating “Temporary Mod Approval”, “Permanent Mod Approval”, “Disapproval”, or “MNS/ORD to be developed”. If disapproved, the lead command will provide the Using Command/agency (if applicable) and the originating organization with the rationale for this decision.

Block 43 Type or print name, grade, title, DSN of the lead command CRB Chairperson or designated representative.

Block 44 Signature of the lead command CRB Chairperson or designated representative.

Block 45 Enter the date signed.

Attachment 5**AF FORM 3525 BLOCK DESCRIPTIONS**

Block 1: Mod Number - obtained from Office responsible for mod number distribution

Note: The prefix "B" (budget) denotes an unapproved modification without a MIP opened or a MNS prepared; the prefix "T" (tentative) denotes modifications have not been approved and indicates the deficiency is being studied; the prefix "F" (firm) denotes modifications that have been approved through required approval levels.

Block 2: Mod Manager location - Enter alpha designator i.e., OO, OC, WR, SMC, ESC, ASC

Block 3: Document Prep Date - Date AF Form 3525 is prepared.

Block 4: Document Production Date - Enter the CCB approval date

Block 5: Mod Title - A brief meaningful title limited to 45 characters. Standard abbreviations and acronyms may be used, but require explanation in block 15. Avoid the word "modification" or its synonyms.

Block 6a: System/Equipment - the MDS and/or Configured Item Identifier (CII) of the weapon system or end item subject to modification. For Simulator packages, include the MDS of the weapon system and list all of the simulators/trainers effected under block 16.

Block 6b: REM (Remarks) - MULTI for multiple weapon system mods; ENG for engine mods; SIM for simulator peculiar mods and SVBUL if the requirement extends from a service bulletin. This block is blank for all other modifications including simulator mods that are weapon system compatible.

Block 7: Mod Class -"P" for Permanent mods; "P(S)" for Safety mods.

Note: Temporary ("T") mods are temporary for special missions or for test or design and development. "T" mods are documented on AF Form 1067 and do not require an AF Form 3525. However, temporary mods affect configuration management, requiring engineering approval and should be approved by the SM CCB.

Block 8: Using Command - indicates the major user (AF Command) of the system/equipment involved. Four characters maximum. When usage is by two or more commands and/or agencies, indicate major user and identify other users in block 36.

Block 9: Agencies Involved - indicate agency involvement with an "X": (a) Air Force, (b) Security Assistance Program, and/or (c) any other agency. If other agency is marked, identify agency in Block 36 (comments).

Block 10: Level of Competition: one-digit code which identifies the applicable type of procurement competition.

1. Price competition (low bidder)
2. Design or technical competition (award on negotiated acquisition)
3. Follow-on after price competition
4. Follow-on after design or technical competition
5. Other competition (split procurement)
6. Non-competition based on catalog or market price (sole source based on catalog or market price. commercial items)
7. Competition not applicable (sole source to a contractor of any kind, including Contractor Logistics Support; include contractor and, if known, the contract number)
8. Organic (modification accomplished solely by Air Force)

Block 11: Kit Installation Level - depot, organizational and intermediate, field team or a combination of depot and field team. (Depot and field team requirements cover both contract and organic installation.)

Block 12a: Installation Hours per Unit - indicate in whole man hours the projected or average time required to install the modification on a single end item.

Block 12b: Total Installation Hours - indicate in whole man-hours the projected or average time required to install the modification on the entire weapon system or group of systems affected. (Does **NOT** include kit proof hours)

Block 13a: Modification Manager - name, office symbol, telephone number, including DSN, of primary OPR for the entire modification; i.e., Program/Modification Manager.

Block 13b: Project Officer - name, office symbol, telephone number, including DSN of secondary OPR, i.e., Program/Modification Manager; Equipment Specialist for the modification action on the affected system (MDS or CII group.)

Block 14: Where Engineering Source Obtained - indicate with an "X" the agency that provided engineering services as follows: (a) SM, (b) Contractor, (c) other. If other is used, explain in block 36.)

Block 15: Requirement/Justification Narrative: Describe the deficiency or condition to be corrected or improved and how the modification will accomplish the required correction or improvement. The description of the requirement must be written so that a person, with no technical background, can understand what is being accomplished as reviewers may not have a technical background. Include the anticipated benefits and an impact in measurable and operational terms if the modification is delayed or disapproved. If applicable, include current and projected MTBM and MIEC for all affected LRUs, number of current and projected MICAP hours, current unscheduled removal rate of equipment and projected removal rate after modification, current and projected mission aborts (in terms of sorties on mission down

time), current excessive maintenance hours and/or extravagant spares requirement for unmodified system/LRUs stating number of maintenance hours being expended (dollars) and/or dollar value of excess spares requirement including one years demand history to reflect increased spares consumption. Ensure the description supports the modification class. State that the FAA certification requirements have been considered under AFD 62-3, Civil airworthiness Standards for Aircraft.

The following numerical equivalent-quantitative data are essential to the justification of the modification:

- a. MTBMA projected for the system prior to modification, which can be obtained from the Maintenance Data Collection System, rounded to the nearest whole hour.
- b. MTBMA projected for the system after modification, rounded to the nearest whole hour.
- c. Amortization time is obtained by a cost and performance analysis. For modifications involving only logistics, the maximum amortization period is five (5) years.
- d. System Equivalent is computed as follows: (Missiles, Simulators/Trainers are exempt from this computation)

$$\frac{(\%D1 - \%D2)F}{100}$$

%D1 = The percent of degradation of the existing system (obtained from the Maintenance Data Collection system)

%D2 = The percent of degradation expected after modification.

F = Force or population size. The equivalent number of systems gained or lost due to an increase or decrease of degradation to the weapon system availability as a result of the modification. System availability directly affects capability to accomplish the mission and as such provides an important consideration for establishing priority for funding and is a capability parameter.

- e. Logistics Support Cost Rate of Return on Dollar Invested is computed based on the following formula:

$$\frac{(UL - AM)AS}{MC(RL)}$$

UL = useful life of the proposed modification.

AM = amortization

AS = annual savings

MC = modification cost

RL = remaining life of the system

Note: Avoid descriptive adjective statements; quantify all statements in numerical equivalent in order to provide the best available defense for HQ USAF/IL to use the justification and description to explain and defend the requirement to the Office of Management and Budget (OMB) and OSD.

Block 16: Proposed Solution Narrative: Indicate any information which will assist in obtaining approval and provide an idea of the ability to obligate the requested funds.

Development status: state who provided the ECP/OCP) and date of ECP/OCP (if not applicable why?). State whether flight test is required and if required, anticipated or actual start and completion dates.

Contracting status: state whether modification will be contractually procured or organically assembled. If contract, include anticipated/actual dates of Request for Proposal (RFP) release. RFP is a document released from Procurement (PK) to contractors requesting technical proposal/bid after PK receives a purchase request (PR). Show when PK receives a PR; when PK expects responses from contractors to RFP; whether contract will be competitive or sole source and, if sole source, to whom; and whether or not the tenants of Acquisition Reform (AR) have been applied to the RFP. (contact your local support group for RFP preparation)

Multi modifications - state all aircraft or systems affected. Include dates of Preliminary Design Review (PDR) and Critical Design Review (CDR), if applicable.

Block 17: Related Document Numbers - identify the various documents applicable to the proposed modification. Don't cite a specific recommendation, mishap report, or message prepared under AFI 91-204.

17a: MIP number if requirement generated from AFI 21-118, or MNS number if requirement generated from AFI 23-01.

17b: PMD as assigned by Air Staff

17c: TCTO Number (s) as assigned locally under TO 00-5-15 and AFMCI 21-301, Technical Order System.

17d: Material Safety Task Group (MSTG) number as assigned by the local Material Safety Officer, **applicable to safety mods only.**

Block 18: Kit Quantities Required/Application: Identifies the total **number of kits** for the modification by category.

a. Number of kits for the Weapon System or Equipment being modified.

b. Number of kits for Replenishment Spares being modified.

c. Number of kits for Other Wartime Requirements Material (OWRM) being modified.

d. Number of kits for Maintenance Trainers being modified. Ensure ground instructional training aircraft (GITA) assigned to Air Training Center (ATC) in codes "TX" and "TJ" are included for consideration for modifications. Provide coordination copy of AF 3525 to applicable prime technical training center/LGSX for certification for applicability.

e. Number of kits for Simulators being modified, Group A and/or B.

f. Number of other Group A and/or Group B kits, if applicable.

g. Total number of kits, a - f, being procured.

Block 19: Action: indicate by an "X" the appropriate box the type (s) of action required. Place information in block 36 if cost increases, additional requirement, or schedule slippage's are concerned.

Block 20: "Cost and Schedule Estimates herein must be revalidated if modification not approved by this date." A date in standard military format specifying the mod approval deadline for this CCB document. If the mod requires HQ USAF approval, ensure that cost estimates remain valid for a minimum of 90 calendar days after they receive the package.

Block 21: Financial Plan, Mod number, Budget program activity code (BPAC): The BPAC is the identifier for the weapon system or system group affected by the mod action and covered by this document. The BPAC consists of a two-digit budget program (aircraft-11; missile-21; other-8X) and a four-digit system management code identifying the weapon system. Some mods affect several different systems, which are identified by different BPACs. In this case, enter several BPACs for the mod number, and provide a separate financial plan for each mod number/BPAC combination or combine them under the SMC "9999". Inflation factors are to be the latest SAF/FM weighted inflation indices for applicable appropriations or AFI 65-503. For new start mods, cost estimates as applicable and appropriate begin in the budget year cycle or later. The financial plan, as displayed on the document, consists of twelve columns for twelve FYs, with a thirteenth column for a cross-year total. Each column contains cost and quantity elements. Cost elements are a maximum of seven digits with three decimal places, and represent millions of dollars; quantity elements are a maximum of five digits and represent whole units. The following are the FY covered:

FPY First prior year; five years prior to the budget FY, or the first year of the modification action, whichever is earlier.

PPY Previous prior year; four years prior to budget FY.

PY Prior year; three years prior to budget FY.

CY Current year; fiscal year in execution; two years prior to the budget FY.

AY Apportionment year; next FY after current year; FY prior to the budget FY.

BY Budget year; for a proposed new-start modification, the first year of expected production funds obligation; for an ongoing modification, two years after the current FY. BY+1, BY+2, BY+3, BY+4, BY+5 - years following the budget year.

OY Final FY that funds may be required; at least six years after the budget FY.

Note 1: The FPY or OY columns of the financial plan can represent roll-ups of one or more years. A gap may exist between PPY and PY or between BY+5 and OY, though the other years will be contiguous. The financial plan will always cover the full history of the modification.

Note 2: To meet the full funding criteria, each modification kit being procured in any one FY must be a complete kit which includes all items necessary to complete the modification of a major end item (EI) or equipment system. Installation costs are to be budgeted in the year the kit is installed. Any item not shipped in the kit must be specifically excluded by HQ USAF direction. The kit must be procured under "Time Phased Procurement" which allows engineering, pre-production cost and associated data to be budgeted and procured in FYs prior to production kit costs and support costs, sustaining engineering, spares, data, training, etc., to be budgeted in subsequent FYs. This, however, depends on the planned delivery of the mod kits and the lead time required on the kits and associated support. Complete support must be procured lead time away to be available when the modification is field operational. Modification kits are to be acquired acquisition lead-time away from required installation date and by fiscal year in a quantity no greater than can be installed before the next year's deliveries begin. Contracts should be structured to pre-

vent production delivery breaks and to permit award of contract no later than March of the first FY and option exercise in the first quarter of each succeeding FY. On multiyear programs, each program year quantity and dollars must meet the full funding principle. (AFI 65-601, Vol. 1)

21a. A&B Kit Engineering - costs by FY required to engineer a satisfactory kit to correct the deficiency. Contractual engineering effort is chargeable to the appropriate BPAC of the central acquisition appropriation. When all or a portion of this requirement is to be done organically, without cost or reimbursement, show no cost for the organic effort. Include funds which were expended previously for PRAM related engineering with an explanation in Block 36.

21b. Engineering Change Orders (ECO) - costs by FY for a contractor generated recommendation for correcting a material deficiency or performance problem on an existing contract which requires funding in the corresponding applicable FY(s). If funds are forecast, a specific requirement must exist. This isn't to be used as a contingency reserve.

21c. Engineering Data/Tech Manuals - costs by fiscal year for engineering data which includes changes to existing specifications, drawings, standards, microfilm, aperture cards, lists, Courseware, etc., necessitated by the proposed modification, TCTO/Tech Manuals which includes estimated costs for preparation of TCTOs and to incorporate data changes resulting from modified TCTOs in all applicable system/equipment technical manuals. When all or a portion of this requirement is to be done organically, without cost or reimbursement, show no cost of the organic effort. ALC engineering personnel payroll is financed by the O&M account (3400) and is not subject to reimbursement. For clarification purposes, **list the cost for Data and TCTO/Manuals separately in Block 36 and identify the dollar amounts required for printing of TCTO changes; the removal of before mod data and the year funds will be needed.**

21d. Group "A" Kit Proof - quantity and cost by FY of the Group "A" proof kits, by FY, which is the first production kit used for validation and verification of the TCTO by the ultimate installer. If there is more than one Group A kit proof kit, costs should be totaled.

21e. Group "A" Recurring Kits - quantities and costs by fiscal year of the items, parts, or components to be permanently installed in a configuration item to support, secure, interconnect, or accommodate the equipment provided in the modification Group B kit. Identify total cost of materials and labor to manufacture the kits (do not include installation labor) and the total number of kits procured by fiscal year. If there is more than one unit cost for kits within a given fiscal year due to different configurations, indicate the difference in kit configuration and unit cost and quantity by fiscal year in block 36. Include kit proof quantities & costs excluding the kit proof kit and the trial installation.

21f. Group "A" Kits Nonrecurring - quantities and costs by fiscal year of engineering and trial installation and testing of proposed modification to make sure it corrects the problem involved, and that system design integrity is not adversely affected. When trial installation is to be done at the depot, compute this entry from direct product standard hours and direct product standard hour rate estimates provided by the Directorate of maintenance.

21g. Group "B" Kit Proof - quantity and cost of all Group "B" kit proof kits, by fiscal year, which is the first production kit used for validation and verification of the TCTO by the ultimate installer.

21h. Group "B" kits/Material (recurring) - quantities and costs by fiscal year of the equipment which when installed in a configuration item with a Group A kit, completes a modification. Normally, Group B items are removable - LRU, Shop Replaceable Units (SRU), etc. Quantities of kits procured by

fiscal year must agree with Group A kits, if required, for full funding requirements. Include the cost of all installed kits excluding kit proof kit and trial installation.

21i. Group "B" Kits Nonrecurring - quantities and cost by fiscal year for trial installation materials, including associated costs for trial installation of equipment.

21j. Modification of Spares Kits - quantities and costs by fiscal year of Group B modification kits to modify replenishment assets (spare LRUs, SRUs) currently in the inventory to satisfy a computed spares requirement.

21k. Peculiar Support Equipment - costs by fiscal year for new procurement of support equipment used only on one aircraft/weapon system/end item and required to install the modification and to maintain the mod after installation and/or costs to modify support equipment extracted from block 21s of all attached supporting AF Form 3525 for required modifications to support equipment.

21l. Simulators - quantities and costs by fiscal year for all attached supporting AF Form 3525 for modification of all simulators that will be affected by the modification. **Leave blank if the form is for a simulator-peculiar modification.** The cost will include simulator Nonrecurring, as well as Group A and Group B kits with associated costs. Costs will either be developed by or coordinated with OO-ALC. Simulators, like aircraft, must schedule their modification installations to minimize downtime. Find out from OO-ALC when simulators will be scheduled for modification installations during or as close to the timeframe in which you are scheduling aircraft installations, then plan and budget for procurement of simulator kits/requirements lead time away from installation. Nonrecurring costs for simulators, as with aircraft, do not have to be in the same year as production kit costs. **For aircraft mods** - only show the BP 11/21/8X cost for simulators, all other costs from attached supporting AF Form 3525 will be included in the non-modification costs, blocks 21t through 21aa.

21m. Trainers - quantities and costs by fiscal year from block 21s of all attached supporting AF Form 3525 to modify maintenance trainers and all associated training equipment needed to facilitate use of the modified system/equipment.

21n. Tooling - costs by fiscal year for special tooling required to install and/or maintain the modification kits or modification equipment.

21o. Software - costs by fiscal year for software modifications resulting from a hardware modification. The software changes will be done according to established instructions. Where all or a portion of this requirement is to be done organically without cost or reimbursement, no cost will be shown for the organic effort.

21p. Kit Proof Labor - costs by fiscal year for labor for kit proofing - actual or estimated cost to accomplish installation and checkout of modification kits before release to service activities (TO OO-5-15). Compute the cost of proofing to be done at depot from direct product standard hour and direct product standard hour rate estimates provided by the **DMAG** organization.

21q. Recurring Installation Labor - costs by fiscal year of depot or contract labor required to install the kits on the system/item being modified. Processing time requirements directly related to, or a result of, depot modification accomplishment are included in modification installation cost and man-hour estimates. The cost of installation labor to be done by depot resources will be computed from direct product standard hour and direct product standard hour estimates provided by the **DMAG** organization. This entry must be viewed as an estimate only pending development of firm labor standards by the **DMAG** organization during trial installation and/or proofing projects. Compute costs under the installation

method and schedule. For BP 11/21, modification funding; for BP8X: FY99 and prior use DPEM (DMAG Customer) funding; FY99 and beyond use BP8X mod funding.

21r. Other - other BP11/21/8X costs by fiscal year. Use as necessary, for any other requirement not identified in line items 21a - 21q, including flight testing, that requires funding with BP 11/21/8X for subject modification. User may replace title "OTHER" with some other 12 character nomenclature.

21s. Subtotal. BP11/21/8X subtotal. Sum of 21a through 21r by fiscal year.

Non-modification costs:

21t. Research, Development, Test and Evaluation (Appropriation 3600). Cost by fiscal year for a modification that provides a new or improved capability that is beyond previously developed technology and initial operating test and evaluation (IOT&E) is applicable. Obtain financial information from the SM program office supporting the modification. If RDT&E is involved, the SM will ordinarily be the program manager until the actual production phase. Include PRAM, RAMTECH, and REPTECH prior requirements funded with 3600.

21u. WRSK/BLSS Spares Inventory - costs by fiscal year of new procurement of investment type spares required for wartime requirements as determined by the Single Manager, OPCOMS, and Inventory Management Specialist (IM) for a weapon system as a result of the modification to preposition wartime assets at the operating bases. Appropriation 4921, MSD, Stock Fund account.

21v. WRSK/LBSS Spares Expense - cost by fiscal year of new procurement of expense, expendable, non-accountable type spares for wartime requirements as a result of the modification and determined by the SM, OPCOM, and IM's for a weapon system to preposition wartime assets at the bases. Appropriation is 4921, Stock Fund.

21w. Initial Peacetime Operating Support Spares Investment - costs by fiscal year of investment spares required to support the first fiscal year delivery of the modified end item. Follow-on spares support for the second year, phased procurement of initial spares, or Spares Acquisition Integrated with Production can be authorized. Compute the cost of all initial investment spares, in accordance with AFMCR 67-15, and provide justification and rationale used in determining requirements. These requirements are associated with the appropriation/budget program responsible for the modification of the end item; i.e., 16/26/8X. Provide spares to support subsequent kit buys from replenishment sources. It is important that the initial spares funding requirements be identified to the fiscal year in which the funds will be obligated. Ensure these funds are programmed in their respective P-series documents.

21x. Initial Peacetime Operating Support Spares Expense - costs by fiscal year for expense spares required to support the first fiscal year delivery of the modified end item. Follow-on spares support for the second year, phased procurement of initial spares, or Spares Acquisition Integrated with Production can be authorized. Compute the cost of all initial expense spares under AFMCR 67-15 and provide justification and rationale used in determining requirements. Budget and fund as Appropriation 4921, Stock Fund, Systems Support Division, Material Program Code 1P. Ensure these funds are programmed in their respective P-series documents.

21y. Common Support Equipment (BP 12, 22, 8X) - costs by fiscal year for new procurement of support equipment which is used by more than one weapon system and is required for the modification. Ensure these funds are programmed in their respective P-series documents.

21z. Sustaining Engineering/Software (583) - costs by fiscal year for system engineering, software - estimated engineering costs to develop required software changes and cost to accomplish all not driven

by a hardware modification and development of software. The software changes will be done according to established instructions. Where all or a portion of this requirement is to be done organically without cost or reimbursement, no cost will be shown for the organic effort. Software changes to integrate or install hardware modifications and software engineering to adapt or accommodate a hardware modification are funded using appropriate budget program (BP 11/21/8X) under AFI 65-601, Vol 1. Software maintenance is funded with DPEM. Ensure that these funds are programmed in their respective P-series documents.

21aa. Other - other non-BP11/21/8X costs by fiscal year. Use as necessary for any other requirement not previously identified that does not require modification funds. You may replace the title "OTHER" with some other 12 character nomenclature.

21bb. Non-BP 11/21/8X Cost Subtotal - subtotal of all elements from 21t through 21aa.

21cc. Total All Costs - sum by fiscal year of 21a through 21r and 21t through 21aa, all costs associated with the modification.

Block 22: Applicable (procurement & installation) lead-times - the date of the purchase request (PR), planning PR or kit assembly (AFMC Form 182) requirement begins the lead time count-down. Compute lead time as follows (all entries are to be in months):

22a. Initial Administrative - the number of months from initiation of the (planning) PR to contract award or kit assembly request (AFMC Form 182) obligation/acceptance by applicable directorate.

22b. Initial Production lead-time - (trial installation) the number of months from contract award or kit assembly document obligation to trial installation.

22c. Initial Production lead-time - (kit proofing) number of months from trial installation to delivery of the kit proof kit.

22d. Initial Production lead-time (kit proof process) number of months from receipt of kit proof kit to completion of the kit proof process. (Kit proof kit is the first production kit)

22e. Initial Production lead-time - (kit delivery) number of months from proofing completion until the date of delivery of the first subsequent batch of recurring kits.

22f. Total Procurement lead-time - sum of 22a through 22e.

22g. Follow-on Administrative - number of months from initiation of the PR/PR amendment to contract award or kit assembly request (AFMC Form 182) obligation/acceptance by appropriate directorate to delivery of the first quantity of kits in this buy.

22h. Follow-on Production lead-time - the number of months from follow-on contract award date/contract option exercise date or follow-on kit assembly document obligation/acceptance date to the delivery of the first quantity of kits in this buy. Include on-dock time.

22i. Total Follow-on procurement lead-time - sum of 22g + 22h.

22j. Dock time - average number of months required from delivery of kit to agency (base, ALC, contractor plant) until availability for kit installation into system or aircraft; i.e., processing time. One-digit to indicate months - 0, 1, 2, 3, etc.

Block 23: Milestones - includes monthly kit installation quantities covering eight fiscal years, beginning with the fiscal year of the earliest milestone event; enter the fiscal years above the columns. An "Out Years" column is to show events and kit quantities occurring after the last month of the chart.

Note: Because some of the milestone dates are always computed using rigorous AFMC defined formulas, "nominal" or "potential" milestones may appear on the AF Form 3525 for some modifications. Think of these as dates when certain events, which may not occur for this particular modification, might occur if conditions were somewhat different.

23a. Engineering Change Proposal Date - date of receipt of ECP or OCP.

23b. CCB date - Date of CCB review and approval.

23c. Planning Purchase Request (PR) Date - date of issue of planning, advanced, funded PR or AFMC Form 182 for organic kit assembly. Compute as the first Contract Award Date (block 23d) minus Initial Administrative Lead-time (block 22a).

23d. Contract Award Dates - dates of award of primary contract and contract options or of obligation of funds for kit assembly in the case of organic modifications. For a new start modification, the contract award date must be in the budget fiscal year. For ongoing or miscellaneous modifications, contract award date can be in any fiscal year. No two contract award dates; may be in the same fiscal year. At least one date is required; the rest are optional.

23e. Trial Installation date - date of completion of trial installation. Computed as first contract award date (block 23d) plus the trial installation lead-time (block 22b).

23f. Kit Proof Completion Group A & Group B Kits - date of completion of final kit proofing. Computed as the trial installation date (block 23e) plus the kit proof lead-time (block 22c).

23g. Kit Delivery Dates Group A/B Kits - dates of expected kit delivery for production kits subsequent to the kit proofing. The first date is computed as the kit proof date (block 23f) plus the initial production lead-time (block 22d) plus the follow-on production lead-time (block 22f), but can never be prior to the first kit delivery date. The third kit delivery date, etc., is computed likewise from the subsequent contract award dates. A kit delivery date is computed for every nonblank contract award date. "X" reflect month of delivery in each appropriate month or quarter of a fiscal year.

23h. Kit Installation quantities, depot or O&I - show the monthly depot or O&I recurring kit quantity installed for the modification action, excluding spares and simulators. When there is a no kit TCTO, show install schedule of equipment being modified.

23i. Kit Installation quantities, field team - Show the monthly field team recurring kit quantity installed for the modification action, excluding spares and simulators. When there is a no kit TCTO, show install schedule of equipment being modified. Leave columns blank if field team installation does not apply.

Block 24: Inflated Cost Summaries by Budget Program Activity: These elements are derived from the total column (cross-year totals) of the financial plan. They indicate budget program appropriations for the modification action, in millions of dollars.

24a. Total Aircraft/Missile/Other/End Item Modification Dollars = cross year inflated dollar total for block 21s. The heading identifies the applicable budget program/subelement: "1100" - BP11 aircraft; "2100" - BP21 missile, "8_00" - BP8X Other.

24b. Common Support Equipment Dollars = cross-year inflated dollar total for block 21y. The heading identifies the applicable budget program/sub-element: "1200" - BP12 aircraft; "2200" - BP22 missile; "8_SE" - BP8X Other.

24c. Reparable Support Division - RSP investment replenishment spares dollars = cross-year inflated dollar total for block 21u. The heading identifies the applicable budget program: Appropriation 4921, Reparable Support Division, Stock Fund Account.

24d. Initial investment spares dollars = cross-year inflated total of block 21w. The heading identifies the applicable budget program: Appropriation "1600" - BP16 aircraft; "2600" - BP26 missile; "8_IS" - BP8X Other.

24e. Initial expense spares + RSP expense spares dollars = cross year inflated dollar total of blocks 21x + 21v. The heading identifies expense spares which are funded with Systems Support Division, Stock Fund "4921" appropriation.

24f. Sustaining Engineering (583) and software dollars = cross year inflated total of block 21z. The heading identifies sustaining engineering/software development costs associated to the modification.

24g. RDT&E (3600) dollars = cross-year inflated total of block 21t. The heading identifies Research, Development, Test and Evaluation costs associated to the modification.

24h. Other dollars = cross-year inflated total of block 21aa. The heading identifies all other non-BP11/21/8X costs.

Block 25: Average Raw Kit Expense (per assembly) - basis for FMS cases and reflects the prorated Unit Cost for kits. Computed from the financial plan, as follows:

To obtain the prorated unit cost, add the dollars across all the years for line items 21a + 21b + 21c + 21d + 21f + 21g + 21i + 21k + 21n + 21o + 21r and divide by the total number of recurring Group A and/or Group B kits; add the total un-inflated sum of 21e divided by the total number of recurring Group A kits and the total un-inflated sum of 21h divided by the total number of recurring Group B kits. This prorated unit cost is used for security assistance programming purposes and is subject to negotiation.

Block 26: Technical risk. An "X" will indicate whether the modification is a high or low technical risk. If the risk is high, explain in block 36 narrative.

Block 27: Cost risk. An "X" will indicate whether the modification is a high or low cost risk. If the risk is high, explain in block 36 narrative.

Block 28: Mod specifications. Indicate if (a) modification specifications are available ("Y" or "N"), (b) if revision of the specifications are required ("Y" or "N") and (c) date when the specification will be available.

Block 29: "Have alternate means of satisfying this requirement been investigated?" An "X" will indicate YES or NO. Maintenance actions? Preferred spares?

Block 30: Production/procurement cut-in. This item only applies if the system is still in production/procurement. Indicate if (a) Modification is approved for production cut-in ("Y" or "N") and identify (b) serial number of first production aircraft or end item to incorporate modification with the (c) projected delivery date.

Block 31: Coordination block. This is a manual (hand scribed) block. The coordination may be accomplished by telephone with follow-up documentation. Indicate the office of responsibility and date of coordination. Coordinate with all functional areas, support agencies and affected activities. To assure coordination timeframe is limited to 30 days, copies of the AF Form 3525 may be sent simultaneously to

all off-base locations with a request for letter response within the 30 days. The following specific coordination's are required include but are not limited to:

31a. SM/IM - Coordination of other SM or IM Directors for multi-mods.

31b. Sim/Trainer – If the modification is a weapon system modification obtain coordination from the simulator/trainer program manager.

Block 32/33/34/35: Signature blocks. These are also manual blocks. Obtain signatures, as applicable, with action annotated and dated on the official file copy of the AF Form 3525.

Block 36: Comments - Use to explain any unusual prior entries or, for multi-system modifications BPAC 9999 list all affected systems not previously identified in block 6 or 16. Continue blocks 15 or 16 as necessary. Include any other appropriate or pertinent comments that will add to understanding this modification.

Block 37a-cc: Modification review Checklist. Indicate YES or NO as appropriate for each of the twenty six elements.

Block 38: Review Remarks - Explain any unusual entries in the Modification Review Checklist (Block37) or to continue the comments narrative (block 36).

Attachment 6

SPECIAL CASES

- 1. Modifications to Operational Space Systems.** Proposed modifications to space systems are processed IAW existing AFSPC instructions.
- 2. Modifications to Munitions.** All proposed modifications to aircraft-carried munitions shall include SEEK EAGLE certification (per AFI 63-104, *The SEEK EAGLE Program*). All modifications to Air Force nuclear munitions or their associated support/training equipment shall be nuclear certified (per AFI 91-103, *Air Force Nuclear Safety Certification Program*). All modifications to Air Force non-nuclear munitions or their associated support/training equipment shall be certified (per AFI 91-205, *Non-Nuclear Munitions Safety Board*).
- 3. Loaned Assets.** Modifications to Air Force assets on loan to a non-Air Force agency (e.g., Defense Intelligence Agency; Security Assistance Programs) will be initiated and approved for funding and installation IAW the existing MOA between the Air Force and the using agency. When these assets are common to Air Force assets, HQ USAF/ILM and HQ USAF/XOO will task the primary using command and AFMC to evaluate the proposed modifications for potential fleet-wide application.
- 4. Defense Communications System Equipment.** Defense Communications Systems equipment, such as Defense Switching Network and satellite terminals are often developed and procured by one military department and managed throughout its life-cycle by an executive service. The Defense Information Systems Agency (DISA) designates certain equipment in those systems as Defense Communications Systems Configuration Items (DCSCI). The DISA participates in the CCBs for Class I engineering changes to DCSCIs. The Air Force manages DCSCIs for which it is the executive service.
 - 4.1. Modifications to Air Force equipment engineered by a non-Air Force executive service, but funded by the Air Force must be approved for installation by the SM's CCB and installed via a TCTO.
 - 4.2. Modifications to Air Force equipment engineered by a non-Air Force executive service will be approved for installation by the responsible engineering service and do not require a TCTO if a comparable document is provided.
- 5. Modifications to Radio Frequency (RF) Dependent Devices:**
 - 5.1 Transmitting devices must obtain approved application for equipment frequency allocation and must secure a valid RF assignment (license) prior to activation IAW DoDD 4650.1, *Management and Use of the Radio Frequency Spectrum*, and AFI 33-118, *Radio Frequency Spectrum Management*. To evaluate RF spectrum support for RF systems, and approved Military Communications-Electronics Board (MCEB) DD Form 1494, Joint Frequency Working Group (J/F 12) file number is required for all modifications associated with RF dependent systems. AFI 33-118, defines the J/12 approval process.
 - 5.2. Radio frequency usability and supportability must be accessed within the intended area of operation.
- 6. Modifications to Training Equipment:**
 - 6.1. When printed circuit boards, modules, or subassemblies are procured specifically for maintenance of training equipment, these items may be inserted locally without requiring modification procedures stated in this AFI, as long as OSS&E considerations are implemented.
 - 6.2. For support equipment (SE) permanently assigned to an Air Training Center (ATC) Technical Training Center (TTC) and used solely for student instruction, all local modifications for maintenance training

must be approved by the wing commander. These local modifications will be documented on the SE Historical Record, or equivalent. Any required funding will be provided locally by the TTC. If the SE is reassigned from the TTC to another organization, the local modifications must be removed and the equipment returned to the current Air Force configuration according to current technical data before reassignment.

7. Electronic Warfare Reprogramming: Proposed modifications to Electronic Warfare Integrated Reprogramming (EWIR) will be accomplished IAW AFI 10-703. EWIR consists of systems and procedures to make changes to electronic warfare (EW) equipment. Reprogramming includes changes in tactics; employment guidance; support operations and equipment; EW equipment software and hardware; aircrew training devices; threat simulators and emitters; and other support systems.

8. Contractor Logistics Supported (CLS) Systems: Modifications to CLS systems will be accomplished IAW the process outlined in the AFI, unless the contractual agreement exempts the contractor from following this process.

9. Joint Programs: When two or more services develop a common aircraft weapon system, Lead Service/Joint directive will determine modification management process. In cases where the AF version of a weapon system significantly differs from the other service(s) and major modifications are necessary to satisfy AF requirements, DoD will make final determination on which service's modification management process will be followed.

Attachment 7**IC 2001-1 TO AFI 63-1101, MODIFICATION MANAGEMENT****17 JULY 2001****SUMMARY OF REVISIONS**

This Interim Change updates AFI 63-1101, *Modification Management*, dated 1 August 2000. It incorporates changes to designate AFI 63-1101 as the prescribing directive for the Air Force Form 3525, *CCB Modification Requirements and Approval Document*. See the last attachment of the publication, IC 2001, for the complete IC. A bar (|) indicates revision from the previous edition.

4. Forms Prescribed, AF Form 1067, *Modification Proposal*.

(*) and AF Form 3525, *CCB Modification Requirements and Approval Document*